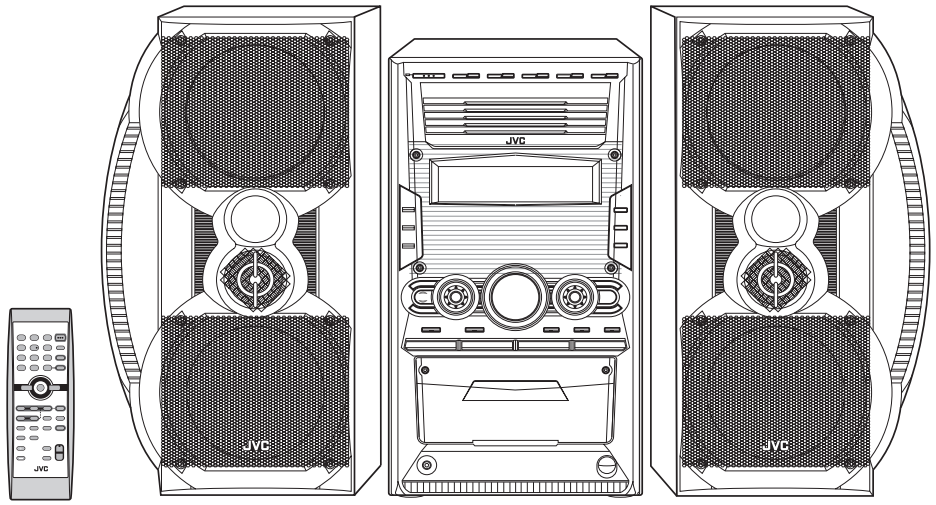
JVC

SERVICE MANUAL

COMPACT COMPONENT SYSTEM

HX-Z30



SP-HXZ30 CA-HXZ30 SP-HXZ30

COMPACT disc DIGITAL AUDIO

Area Suffix	
J	U.S.A.
C	Canada

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No.22067
2003/6

SPECIFICATION

Amplifier section-CA-HXZ30	Output Power	SUBWOOFERS		190 W per channel min. RMS driven into 6 Ω at 63 Hz with no more than 10% total harmonic distortion.
	MAIN SPEAKERS			80 W per channel min. RMS driven into 6 Ω at 1 kHz with no more than 10% total harmonic distortion.
	Audio input sensitivity/impedance (Measured at 1 kHz with tape recording signal 300 mV)	AUX		300 mV/47 kΩ
		Speakers/ impedance	SUBWOOFERS	6 Ω - 16 Ω
			MAIN SPEAKERS	6 Ω - 16 Ω
Tuner	FM tuning range			87.5 MHz - 108.0 MHz
	AM tuning range			530 kHz - 1 710 kHz
CD player	Disc capacity			5 discs
	Dynamic range			87 dB
	Signal-to-noise ratio			90 dB
	Wow and flutter	Immeasurable		
	MP3 recording format	MPEG 1/2 Audio Layer 3		
	Max. Bit rate			320 kbps
Cassette deck	Frequency response	Normal (type I)		50 Hz - 14 000 Hz
		Wow and flutter		0.15% (WRMS)
General	Power requirement			AC 120 V , 60 Hz
	Power consumption			250 W/310 VA (in operation) 27 W (on standby)
	Dimensions (approx.)			205 mm × 370 mm × 380.5 mm (W/H/D) (8 1/8 inch × 14 5/8 inch × 15 inch)
	Mass (approx.)			10.5 kg (23.2 lbs)
Supplied accessories	See page 6.			
Speaker section-SP-HXZ30	Type			3-Way 4-Speaker Bass-Reflex Type Twin Hyper Power-Drive Subwoofer
	Speaker units	Subwoofer		20 cm (7 7/8 inch) cone × 1
		Woofer		13.5 cm (5 3/8 inch) cone × 2
		Tweeter		5 cm (2 inch) cone × 1
	Power handling capacity	Subwoofer		190 W
		Main speaker		80 W
	Impedance	Subwoofer		6 Ω
		Main speaker		6 Ω
	Frequency range	Subwoofer		30 Hz - 818 Hz
		Main speaker		75 Hz - 30 000 Hz
	Sound pressure level	Subwoofer		81 dB/W·m
	Main speaker			88 dB/W·m
	Dimensions (approx.)			247 mm × 452 mm × 391 mm (W/H/D) (9 3/4 inch × 17 13/16 inch × 15 7/16 inch)
	Mass (approx.)			10.0 kg (22.1 lbs) each

SECTION 1
PRECAUTION

1.1 Safety Precautions

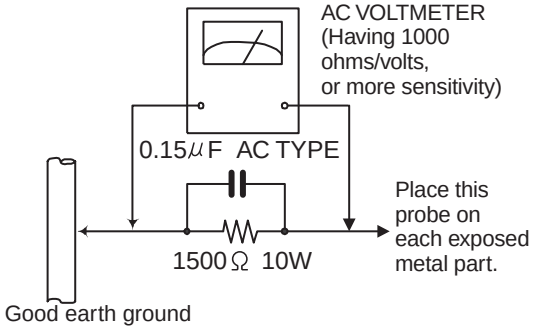
(1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.

(2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.

(4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.

(5) Leakage shock hazard testing
After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.Do not use a line isolation transformer during this check.
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000Ω per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
Measure the AC voltage across the resistor with the AC voltmeter.
Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5μ mA AC (r.m.s.).



1.2 Warning

(1) This equipment has been designed and manufactured to meet international safety standards.
(2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
(3) Repairs must be made in accordance with the relevant safety standards.
(4) It is essential that safety critical components are replaced by approved parts.
(5) If mains voltage selector is provided, check setting for local voltage.

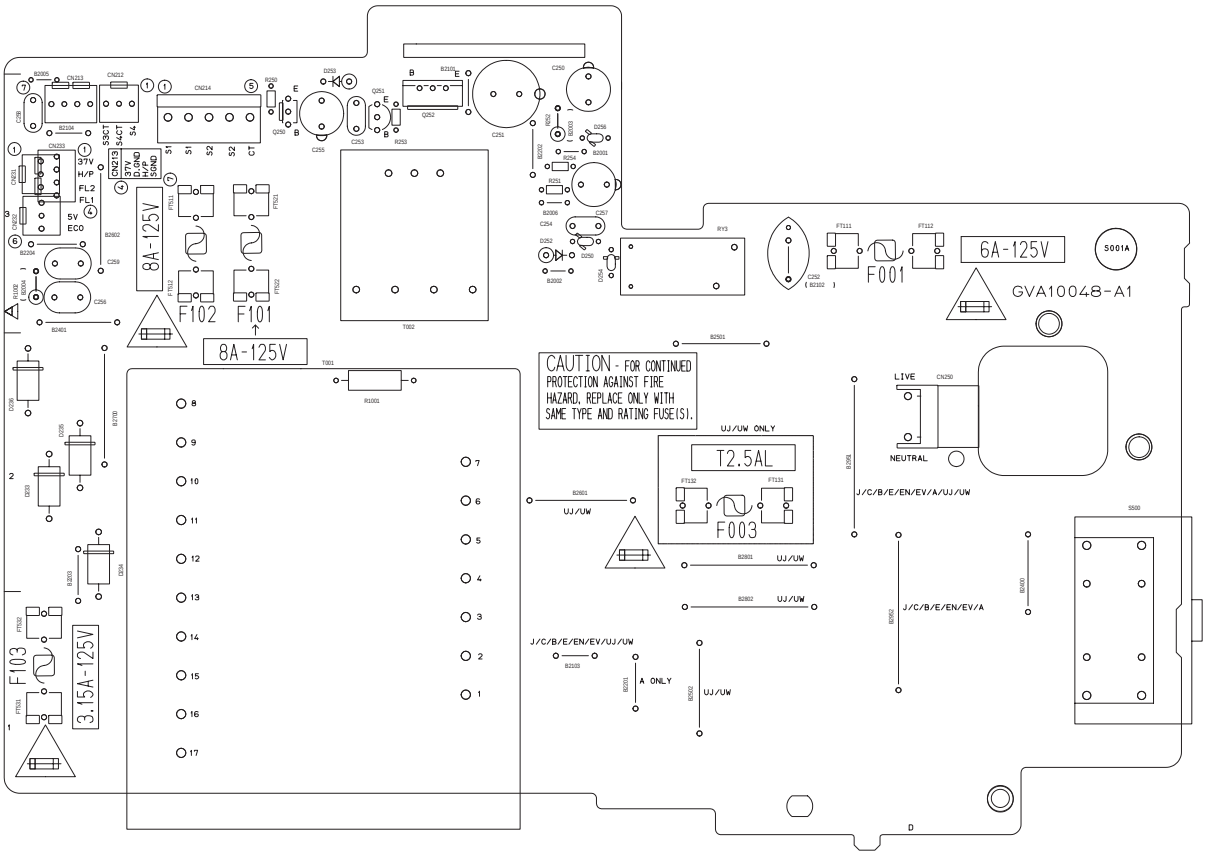
1.3 Caution

Burrs formed during molding may be left over on some parts of the chassis.
Therefore, pay attention to such burrs in the case of preforming repair of this system.

1.4 Critical parts for safety

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▮) and ICP (●) or identified by the " ⚠ " mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer.
(This regulation dose not Except the J and C version)

1.5 Importance administering point on the safety



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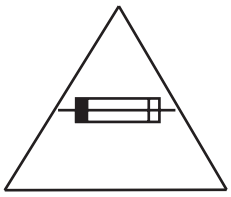


Caution: For continued protection against risk of fire, replace only with same type 6A/125V for F001, 3.15A/125V for F103, 8A/125V for F101 and F102. This symbol specifies type of fast operating fuse.

Precaution: Pour eviter risques de feux, remplacez le fusible de surete de F001 comme le meme type que 6A/125V, de F́103 que 3.15A/125V, et 8A/250V pour F101 et F102.
Ce sont des fusibles sûretes qui functionnes rapide.

1.6 Preventing static electricity

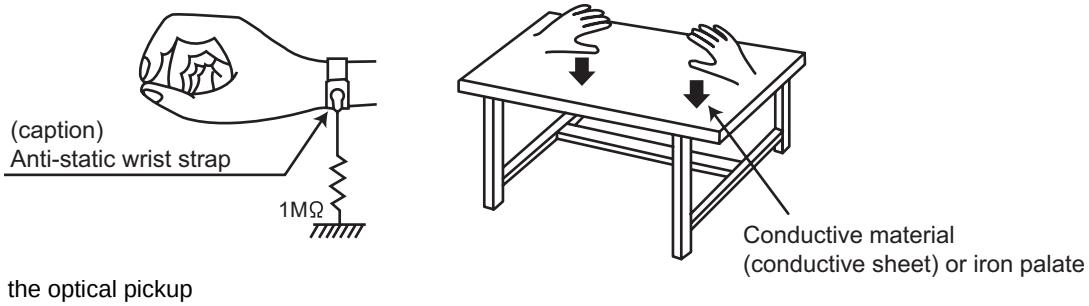
Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.6.1 Grounding to prevent damage by static electricity

Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD players.
Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench
Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

(2) Ground yourself
Use an anti-static wrist strap to release any static electricity built up in your body.



(3) Handling the optical pickup
- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

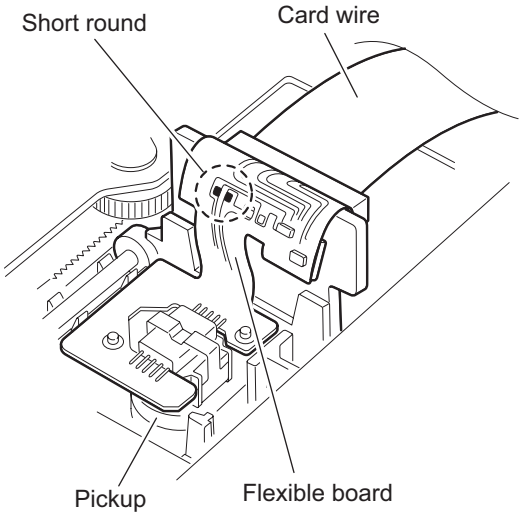
1.7 Handling the traverse unit (optical pickup)

(1) Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
(2) Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
(3) Handle the flexible cable carefully as it may break when subjected to strong force.
(4) I t is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.8 Attention when traverse unit is decomposed

***Please refer to "Disassembly method" in the text for the CD pickup unit.**

- Apply solder to the short land sections before the flexible wire is disconnected from the connector CN101 on the CD servo board. (If the flexible wire is disconnected without applying solder, the CD pickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land sections after connecting the flexible wire.



SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

SECTION 3
DISASSEMBLY

3.1 Main body

3.1.1 Removing the metal cover (See Fig.1~3)

(1) Remove the six screws **A** on the back of the body.
(2) Remove the screw **B** on each side of the body.
(3) Remove the metal cover from the body by lifting the rear part of the cover.

CAUTION:
Do not break the front panel tab fitted to the metal cover.

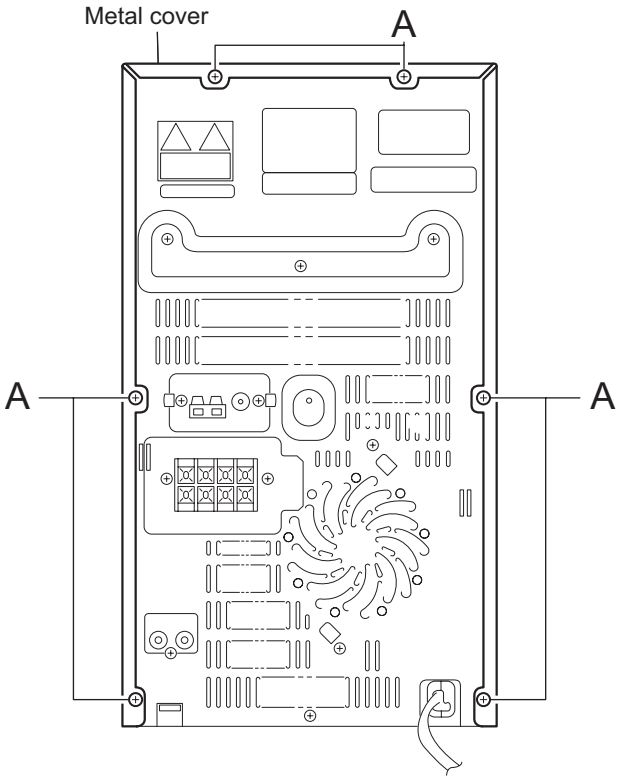


Fig.1

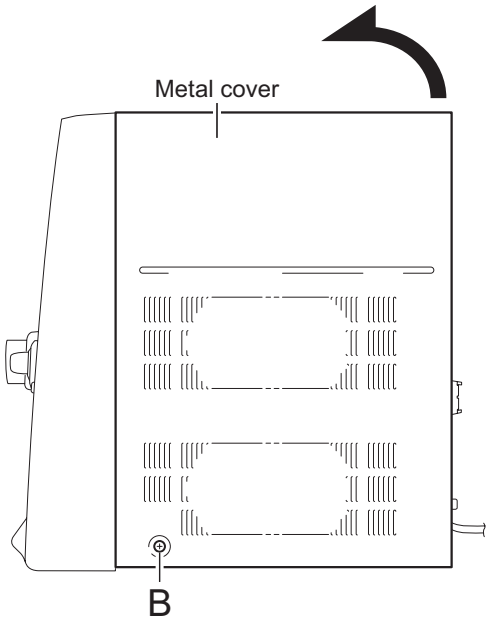


Fig.2

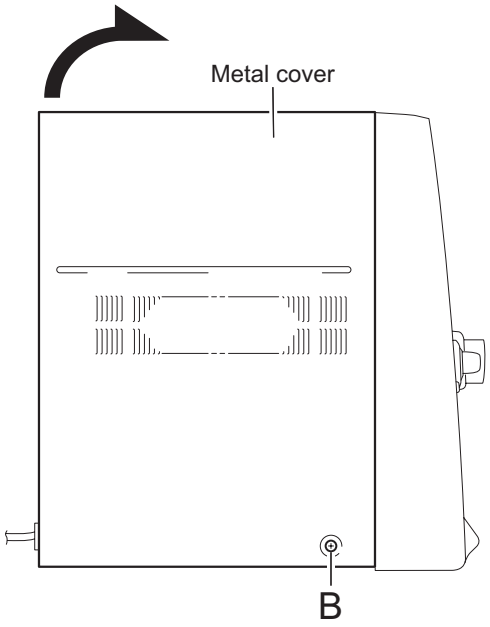


Fig.3

3.1.2 Removing the CD changer mechanism assembly (See Fig.4, 5)

- Prior to performing the following procedure, remove the metal cover.
  (1) Disconnect the card wire from connector CN651 on the CD servo control board on the right bottom of the CD changer mechanism assembly.
  (2) Remove the four screws **C** attaching the CD changer mechanism assembly on top of the body.
  (3) Remove the CD changer mechanism assembly while lifting the rear part.

CAUTION:

Do not damage the CD fitting when removing the CD changer mechanism assembly.

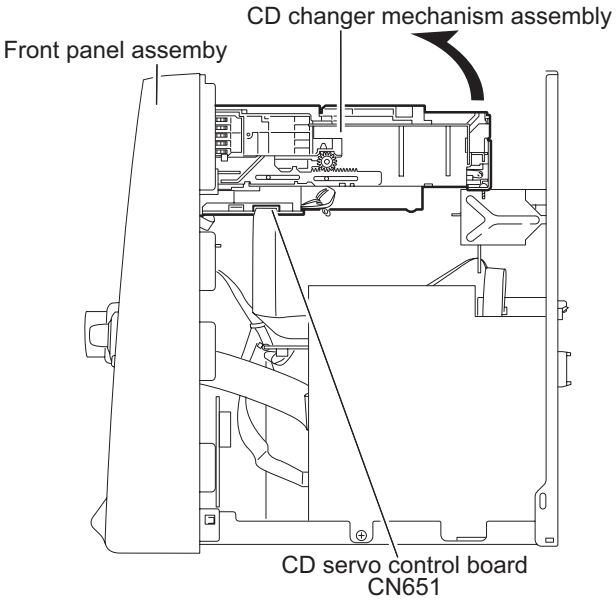


Fig.4

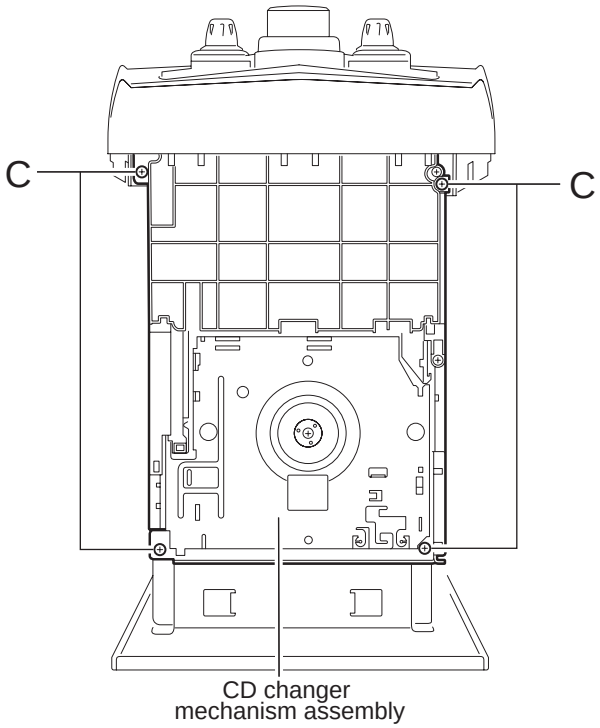


Fig.5

3.1.3 Removing the front panel assembly (See Fig.6~9)

- Prior to performing the following procedure, remove the metal cover and the CD changer mechanism assembly.
  (1) Disconnect the card wires from connector CN44 and CN870 on the main board on the right side of the body.
  (2) Disconnect the wire from connector CN701 on the bridge board.
  (3) Cut the band.
  (4) Disconnect the wire from connector CN231 on the primary board on the left side of the body and remove the band fixing the wire.
  (5) Disconnect the ground wire extending from phones board from bottom chassis.
  (6) Remove the three screws **D** attaching the front panel assembly at the bottom of the body
  (7) Release the two joints **a** on the lower left and right sides of the front panel assembly using a screwdriver, and remove the front panel assembly toward the front.

REFERENCE:

Front panel need to be tilt a little bit as release from bottom chassis.

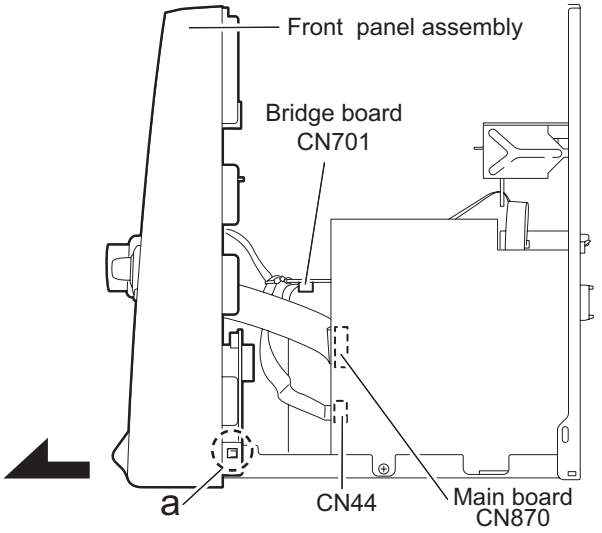


Fig.6

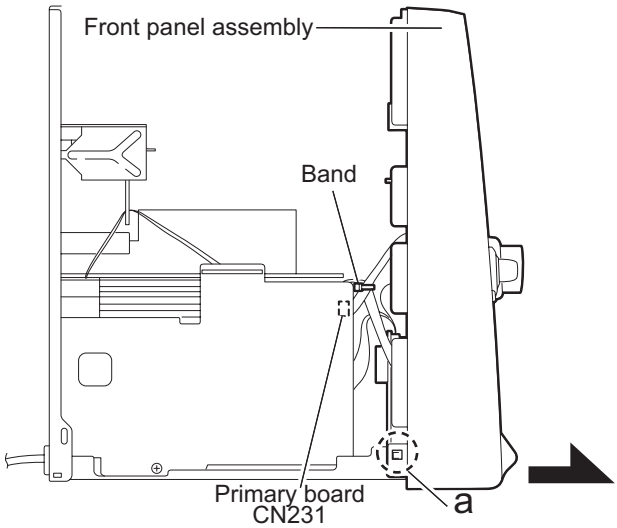


Fig.7

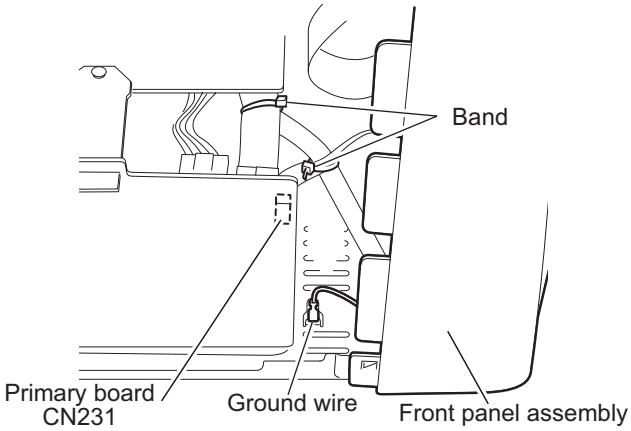


Fig.8

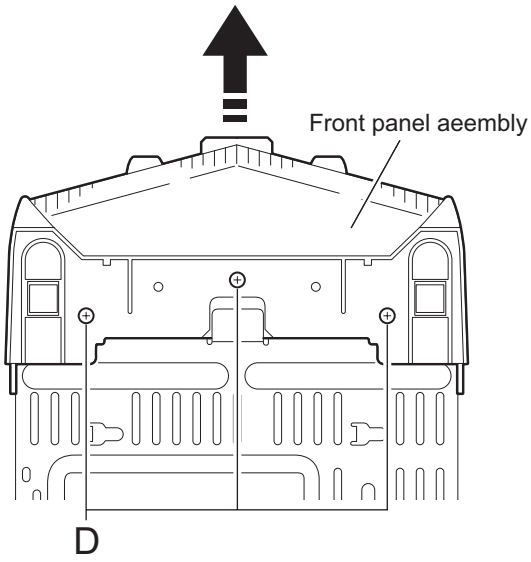


Fig.9

3.1.4 Removing the tuner pack assembly (See Fig.10, 11)

- Prior to performing the following procedure, remove the metal cover and the CD changer mechanism assembly.
  (1) Disconnect the card wire from connector CN1 on the tuner pack assembly on the right side of the body.
  (2) Remove the two screws **E** on the rear panel on the back of the body.

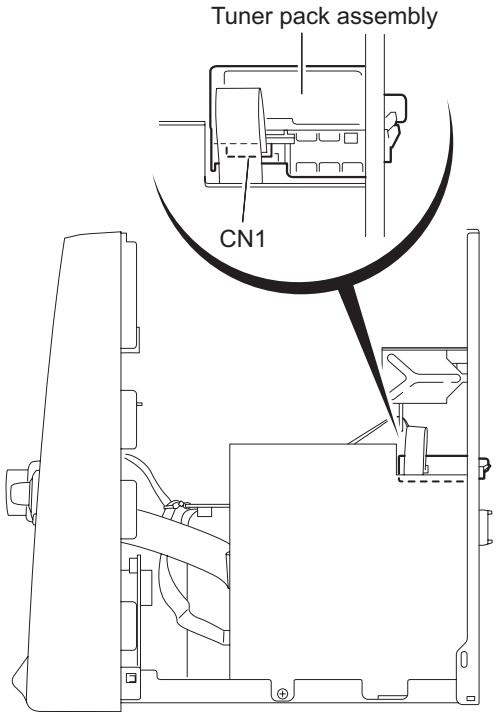


Fig.10

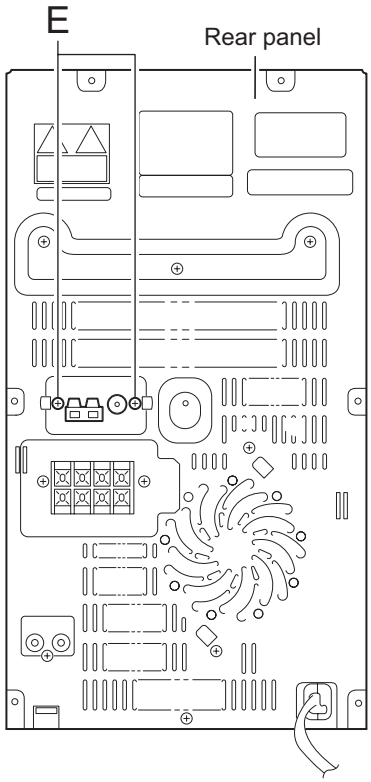


Fig.11

3.1.5 Removing the rear panel (See Fig.10, 12~16)

- Prior to performing the following procedure, remove the metal cover and the CD changer mechanism assembly.
  (1) Remove holding board by remove a plastic rivet and then slide out the holding board as shown in fig. 12.
  (2) Disconnect the fan wire extending from the fan assembly from connector CN206 on the bridge board.
  (3) Disconnect the card wire from connector CN1 on the tuner pack.
  (4) Remove four screws **F** from rear panel.
  (5) Release joints **b** which on right bottom and left bottom of rear panel. The joint can be release by pull outward the side of rear panel.

REFERENCE:

Fan assembly and tuner pack will come off with rear panel.

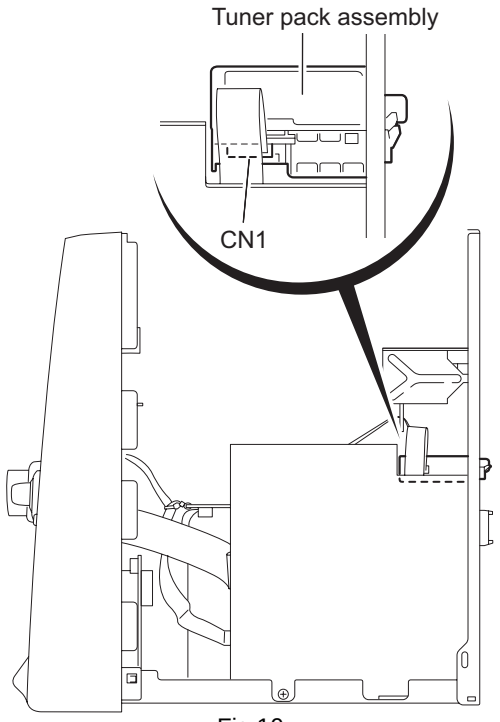


Fig.10

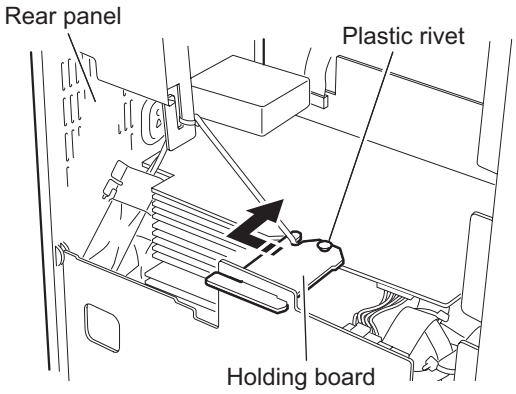


Fig.12

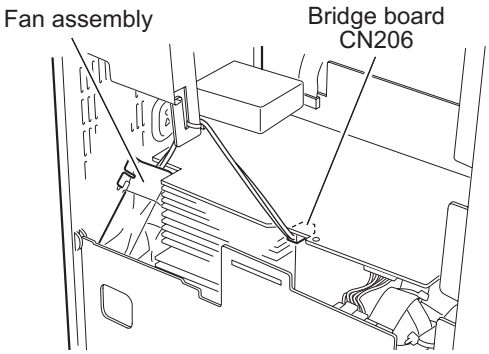


Fig.13

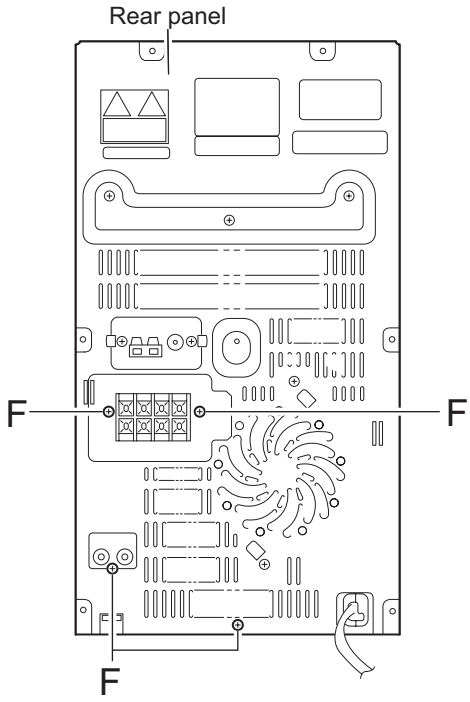


Fig.14

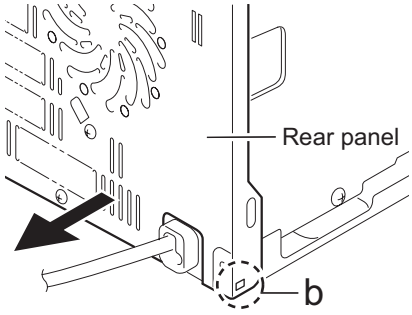


Fig.15

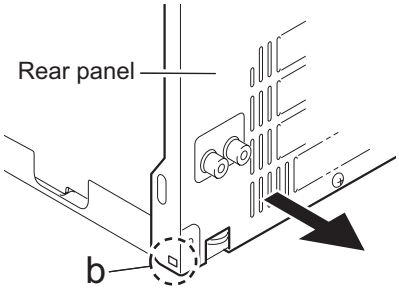


Fig.16

3.1.6 Removing the fan assembly (See Fig.17, 18)

- Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly and the rear panel.
  (1) Cut the band holding the fan wire.
  (2) Remove two screws **G** on the rear panel.
  (3) Rotate fan assembly in clockwise direction to release fan assembly from rear panel (joints **c**).

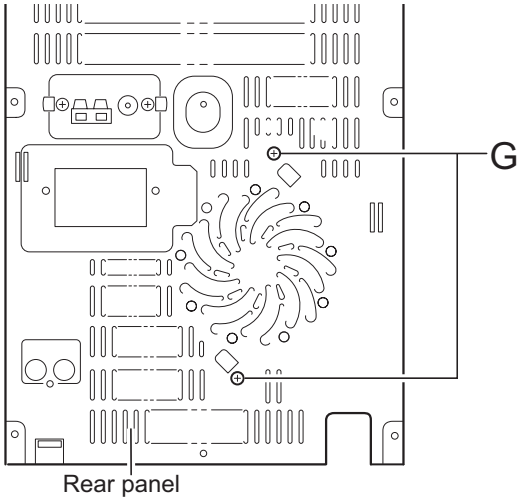


Fig.17

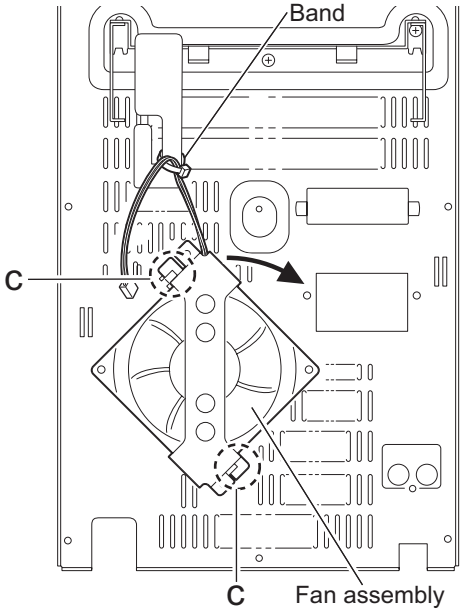


Fig.18

3.1.7 Removing the main board (See Fig.19)

- Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly and the rear panel.
  (1) Cut off the band.
  (2) Disconnect the card wires from connector CN44 and CN870 on the main board.
  (3) Remove the screw H attaching the main board.
  (4) Disconnect connector CN217 and CN311 on the main board outward and release from the base chassis (joint d) upward.

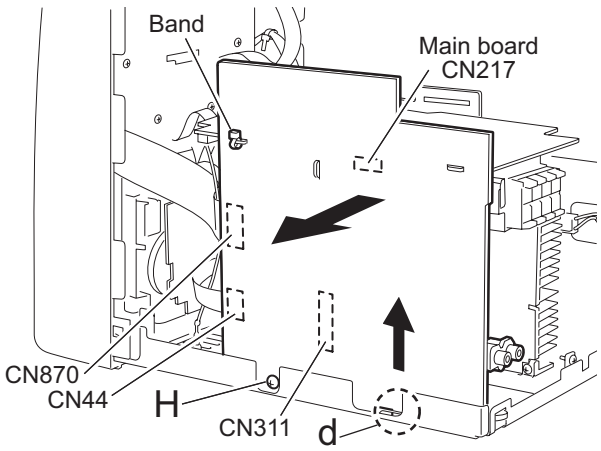


Fig.19

3.1.8 Removing the bridge board / regulator board / heat sink (See Fig.20~23)

- Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly, the rear panel and main board.
  (1) Disconnect the wire from connector CN212, CN213 and CN214 on the primary board respectively and remove the band attaching the wires.
  (2) Disconnect the wire from connector CN701 on the bridge board.
  (3) Disconnect the ground wire extending from the bridge board from bottom chassis.
  (4) Remove the two screws **I** attaching the heat sink bracket and move the heat sink in the direction of the arrow to release from the base chassis. The bridge board and the regulator board come off with the heat sink.
  (5) Remove the two screws **J** attaching the heat sink bracket.
  (6) Remove the two screws **M**, detach bridge board from regulator board by disconnect connector CN205.
  (7) Remove the two screws **K** and two screws **L** to detach regulator board from heat sink.

CAUTION:

As assembly back the regulator board and bridge board to heat sink.

Regulator board must be assembly to heat sink first and screws **K** and **L** must be screwed before bridge board attach to regulator board.

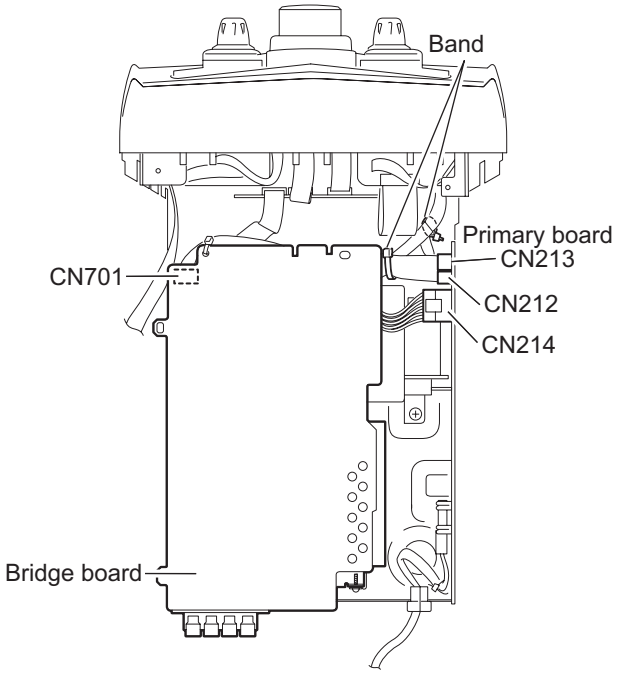


Fig.20

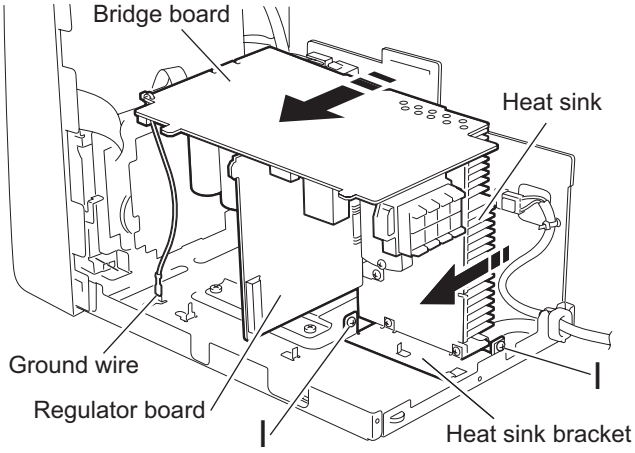


Fig.21

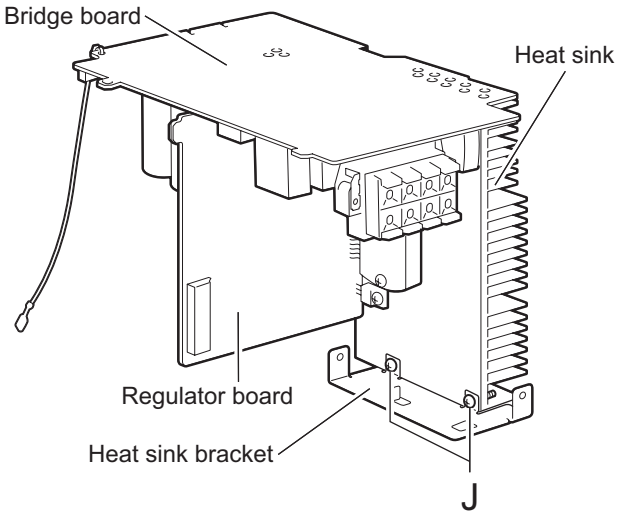


Fig.22

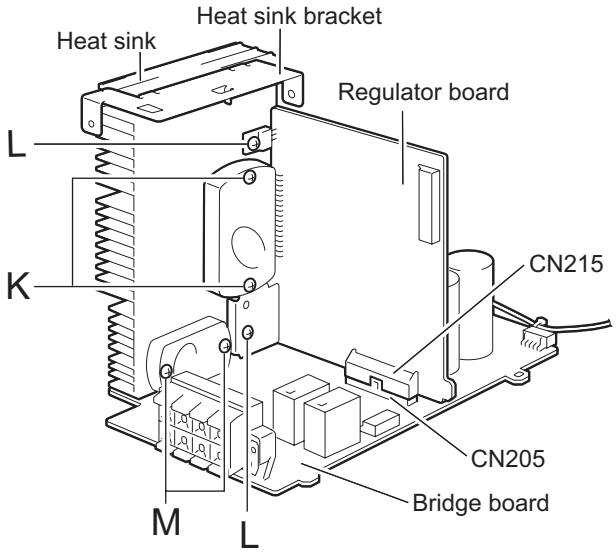


Fig.23

3.1.9 Removing the power transformer assembly (See Fig 24, 25)

- Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly, the rear panel, the main board and the bridge board / regulator board.
  (1) Remove the screw **N** attaching the primary board.
  (2) Disconnect the wire from connector CN231 on the primary board.
  (3) Remove the four screws **O** attaching the power transformer assembly.
  (4) Detach the cord stopper from the base chassis upward.

REFERENCE:

When disconnecting the power cord from connector CN250 on the primary board, remove the fixing band.

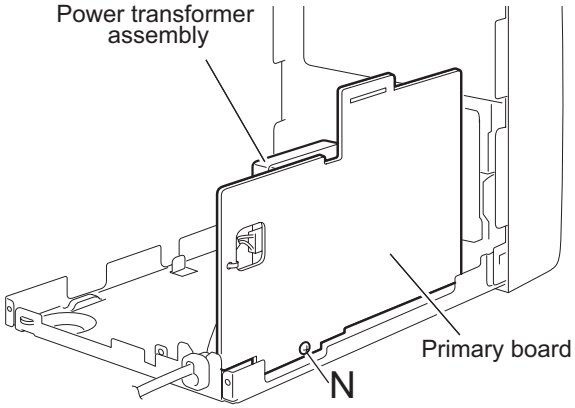


Fig.24

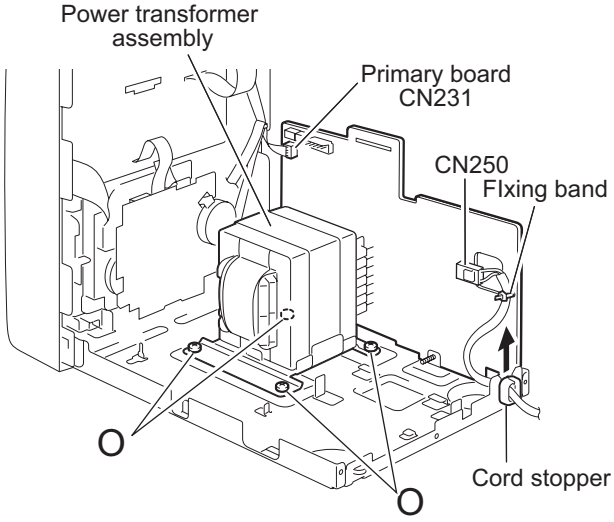


Fig.25

3.2 Front panel assembly

Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly and the front panel assembly.

3.2.1 Removing the cassette mechanism assembly (See Fig.26)

(1) Disconnect the card wire from connector CN33 on the head amplifier & mechanism control board.
(2) Remove the two screws **P**, and the two screws **Q** attaching the cassette mechanism assembly.

3.2.2 Removing the headphone board (See Fig.26)

(1) Remove the screw **R** and pull out the headphone board backward.
(2) Cut off the band.

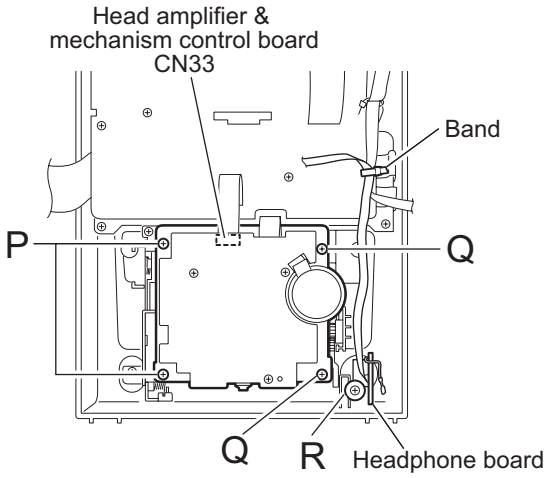


Fig.26

3.2.3 Removing the switch / micon board (See Fig.27~29)

- Prior to performing the following procedure, disconnect the card wire from CN43 on the micon board.
  (1) Disconnect the card wire from connector CN840 on the micon board.
  (2) Remove the fifteen screws **S** attaching the switch / micon board.
  (3) Remove the spacer fixing the wire.
  (4) Move the switch /micon board in the direction of the arrow to disconnect the wire from connector CN880 and CN900 on the micon board.

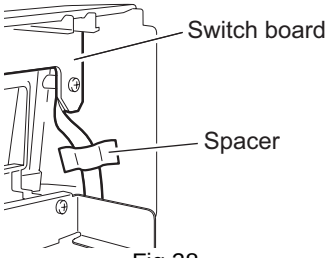


Fig.28

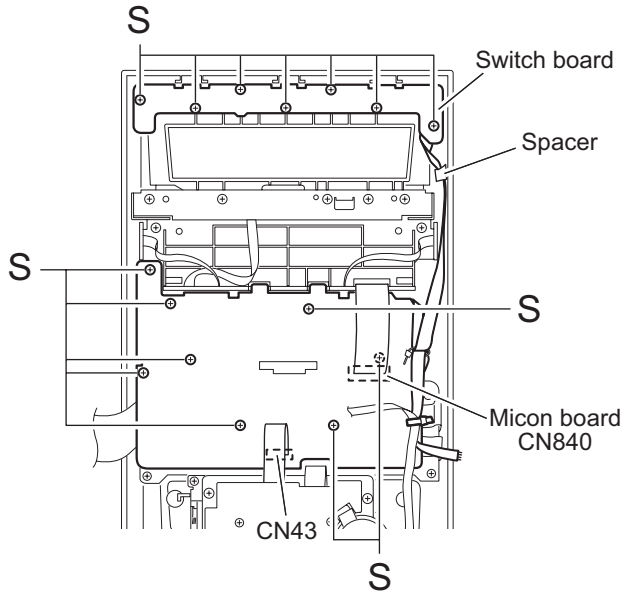


Fig.27

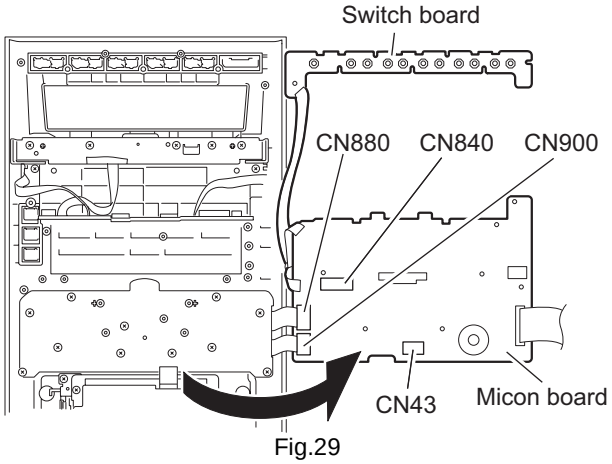


Fig.29

3.2.4 Removing the FL board assembly (See Fig.30, 31)

- Prior to performing the following procedure, remove the switch / micon board.
  (1) Remove the five screws **T** attaching the stay bracket (1).
  (2) Remove the three screws **U** attaching the FL board assembly.

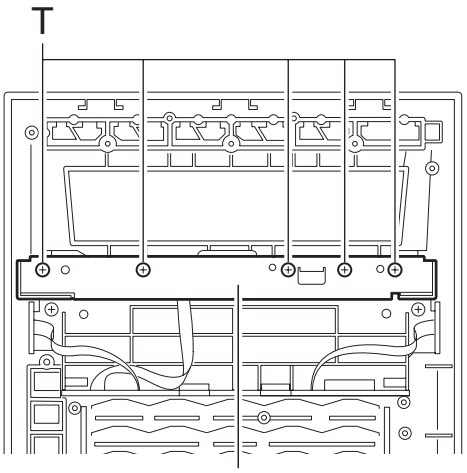


Fig.30

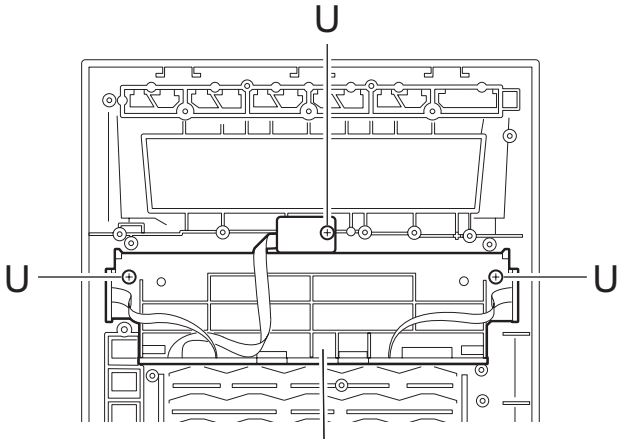


Fig.31

3.2.5 Removing the button board (See Fig.32~34)

- Prior to performing the following procedure, remove the switch /micon board.
  (1) Pull out the preset knob, the volume knob and the sound mode knob.
  (2) Remove the two screws **V** attaching the knob holder. Remove the nut from the front panel.
  (3) Remove the eleven screws **W** attaching the button board.

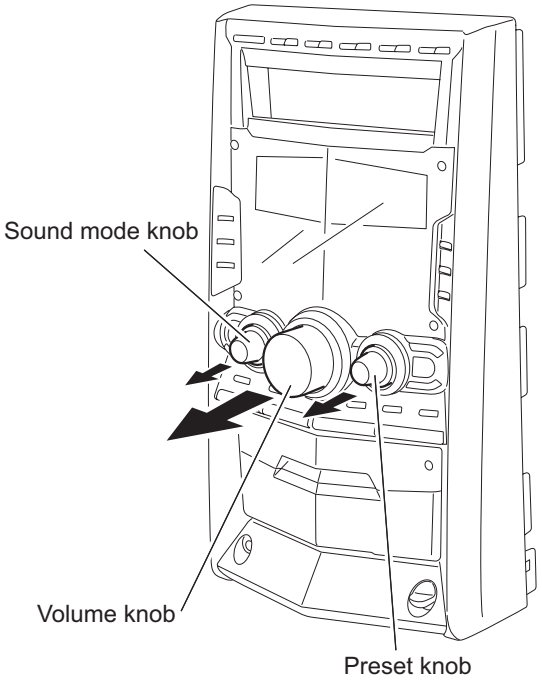


Fig.32

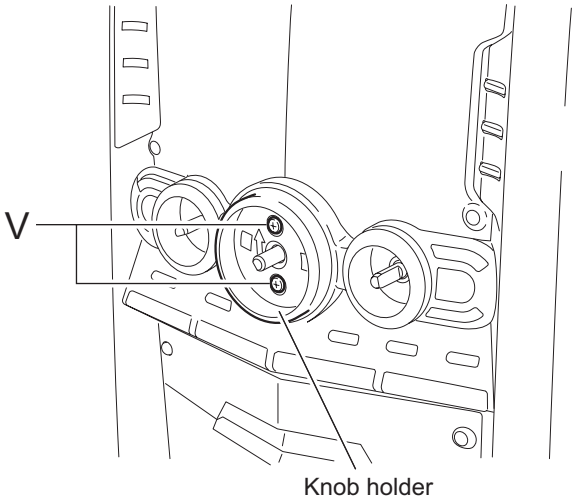


Fig.33

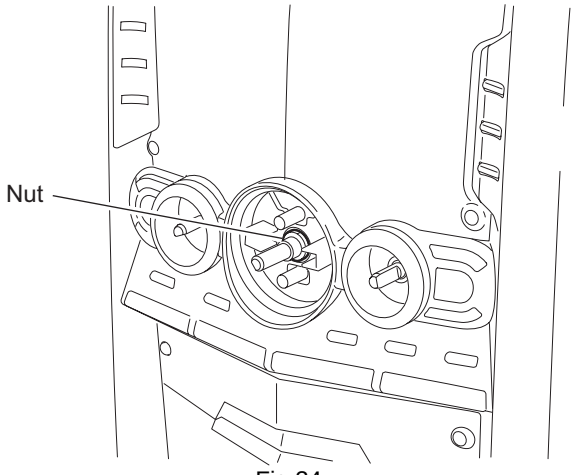


Fig.34

3.3 CD changer mechanism

3.3.1 Removing the tray assembly (See Fig.1 ~ 5)

(1) Remove the two screws **A** from the top cover and release the two joints **a** on both sides of the body.
(2) Remove the top cover with the two rods attached to the top cover and lifter assembly respectively.
(3) Remove the open det lever on the left side of the body.
(4) Push part b of the slide (R) assembly on the right side of the body to unlock the tray assembly. Draw out the trays toward the front.

Attention:

The tray can be locked if all tray assemblies are attached.

(5) From top of the body, move the stopper tab c in the direction of the arrow and release. Pull out the tray assemblies from the body.

Caution:

Remove the tray assembly from top tray 5 in order.

Attention:

When reattaching the sub tray of the tray assembly, or when removing the CD remaining inside, refer to another section.

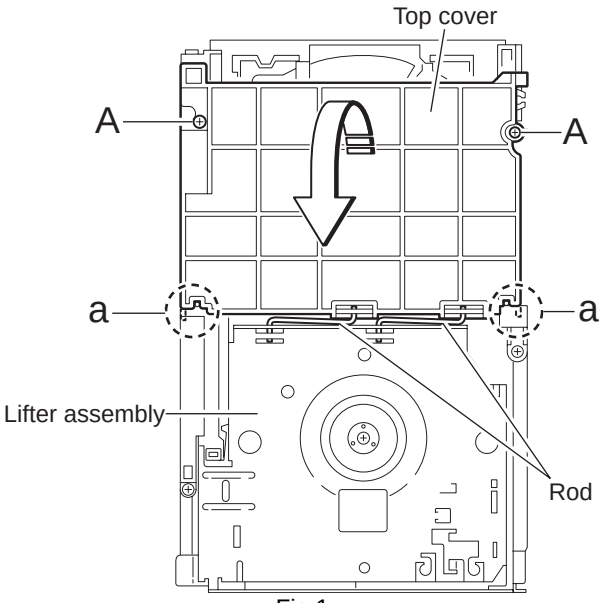


Fig.1

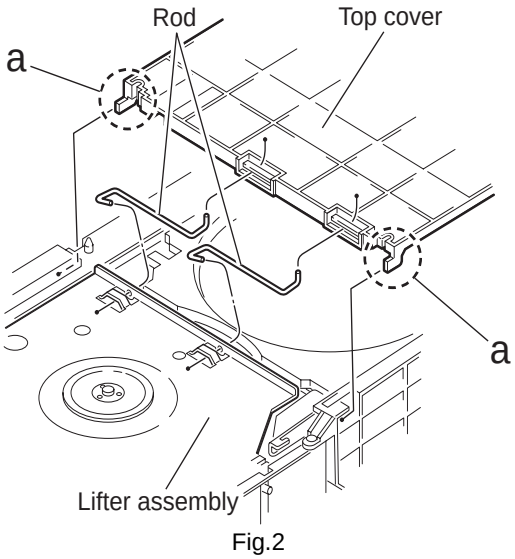


Fig.2

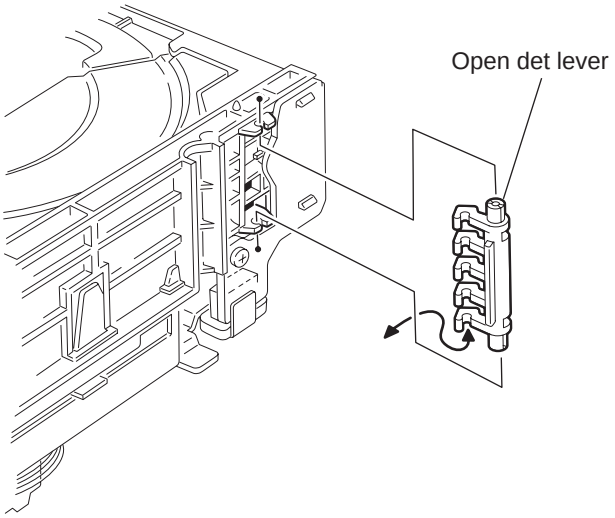


Fig.3

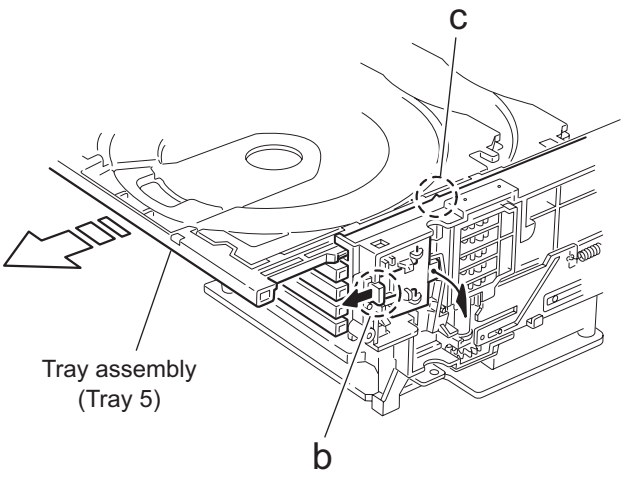


Fig.4

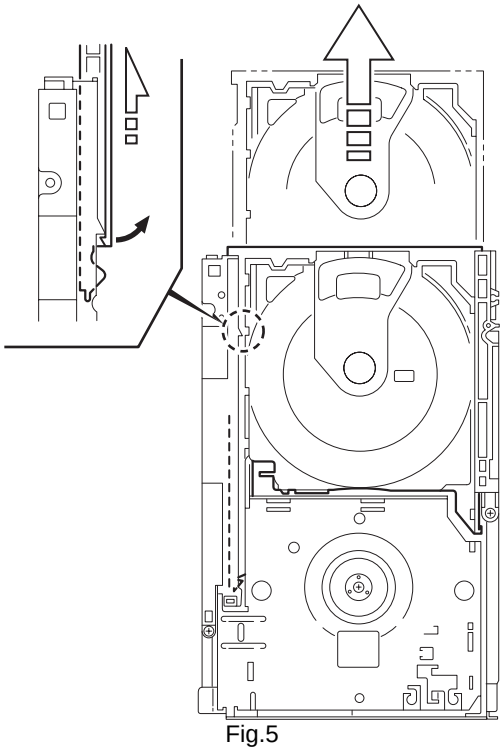


Fig.5

3.3.2 Removing the servo control board (See Fig.6 ~ 9)

Caution:

Solder the short-circuit point on the pickup before disconnecting the card wire extending from the pickup. If you do not follow this instruction, the pickup may be damaged.

(1) Disconnect the card wire from connector CN251 and each wire from connector CN252, CN253 and CN602 on the servo control board on the bottom of the body. Disconnect the wire from joint **d**.
(2) Solder the short round point on the flexible board of the pick up.
(3) Remove the four screws **B** and turn the servo control board as shown in the figure.
(4) Disconnect the card wire from connector CN601 on the servo control board.Caution: Unsolder the short-circuit point after reassembling.

Caution:

When reassembling, twist the wires to be connected to connector CN252 and CN253 twice.

3.3.3 Removing the switch board (See Fig.9)

(1) Disconnect the wires from connector CN252 and CN253 on the servo control board.
(2) Remove the screw **C** attaching the switch board.
(3) Release the wires from the slot e of the switch board.

Caution:

When reassembling, let the wires through the slot **e** of the switch board and twist them twice.

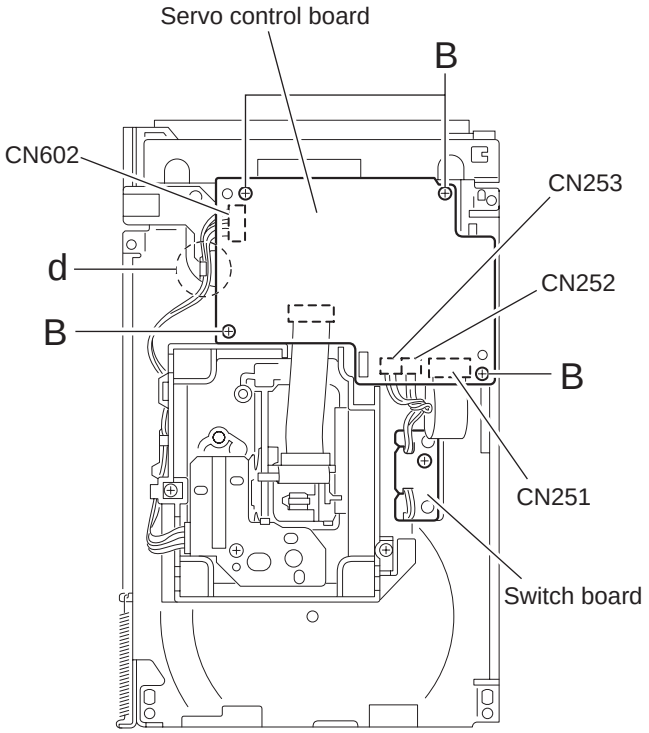


Fig.6

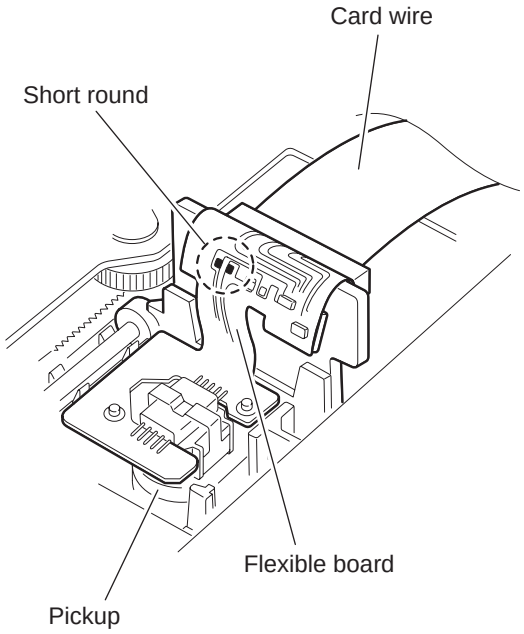


Fig.7

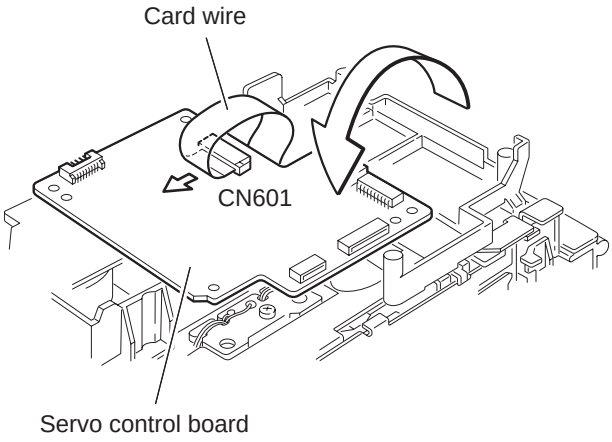


Fig.8

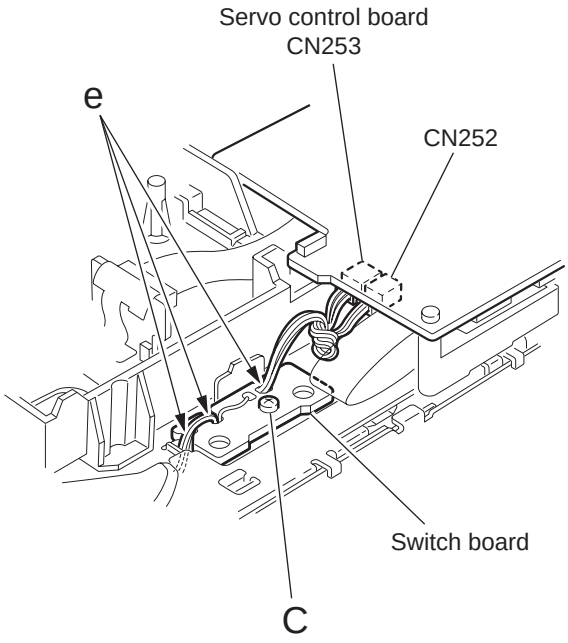


Fig.9

3.3.4 Removing the motor board (See Fig.10 , 11)

- Prior to performing the following procedure, remove the servo control board.
  (1) Turn over the body and remove the two screws **D**. Move the CD module bkt. in the direction of the arrow to release two joints **f**.
  (2) Unsolder the four soldered parts on the motor of the motor board.

  Caution:
  If removing the motor board with the motor, you should remove the screws attaching the motor from top of the body(Refer to another section).
  (3) Remove the two screws **E** attaching the motor board.
  (4) Remove the spacer fixing the motor board and tray switch board, and disconnect connector CN2 on the motor board.
  (5) Disconnect the card wire from connector CN1 on the motor board.

Caution:
When reconnecting the card wire, let the card wire through the slot g of the motor board and attach it to the bottom of the body using a double tape.

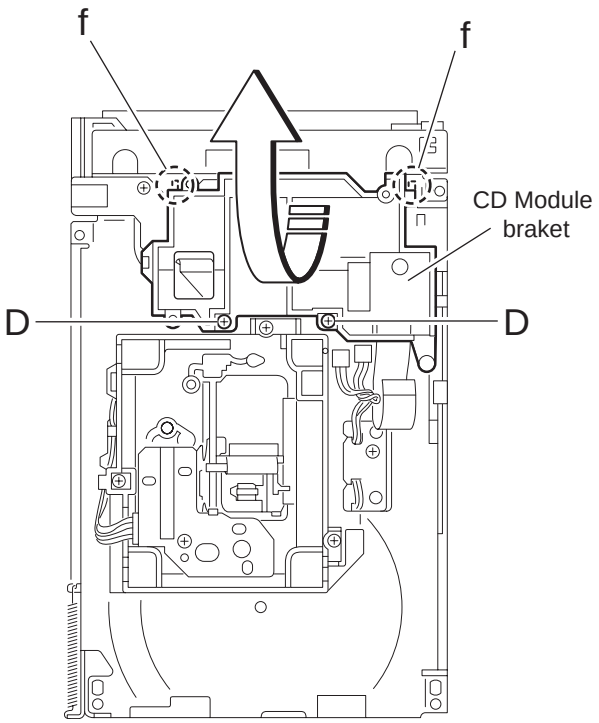


Fig.10

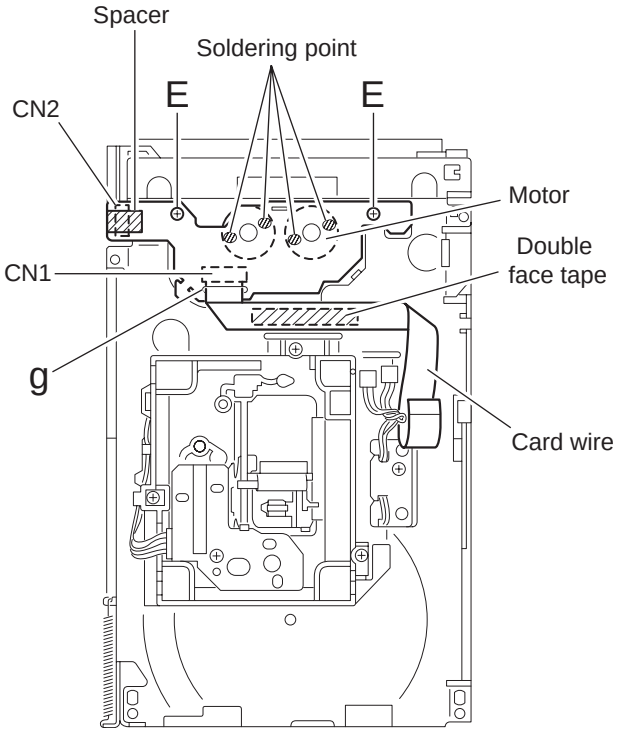
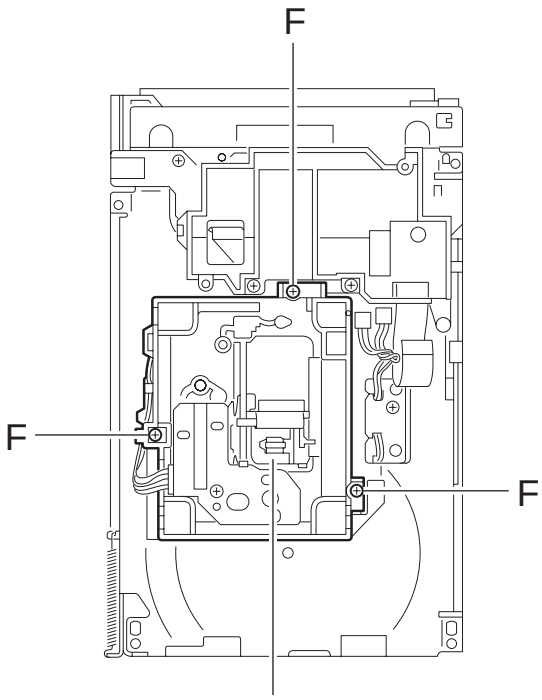


Fig.11

3.3.5 Removing the CD tramecha assembly (See Fig.12)

- Prior to performing the following procedure, remove the servo control board.
  (1) Turn over the body and remove the three screws **F** attaching the tramecha.



CD Tramecha assembly
Fig.12

3.3.6 Removing the pickup (See Fig.13 , 14)

- Prior to performing the following procedure, remove the servo control board and CD tramecha assembly.
  (1) From top of the CD tramecha assembly, turn the cam gear in the direction of the arrow to move the pickup assembly outward.
  (2) Push down the stopper **h** in the direction of the arrow and pull out the shaft.
  (3) Release the joint **i** of the pickup assembly and mecha base.
  (4) Remove the screw **G** attaching the CD rack. Release the four tabs **j** at the bottom of the CD rack.

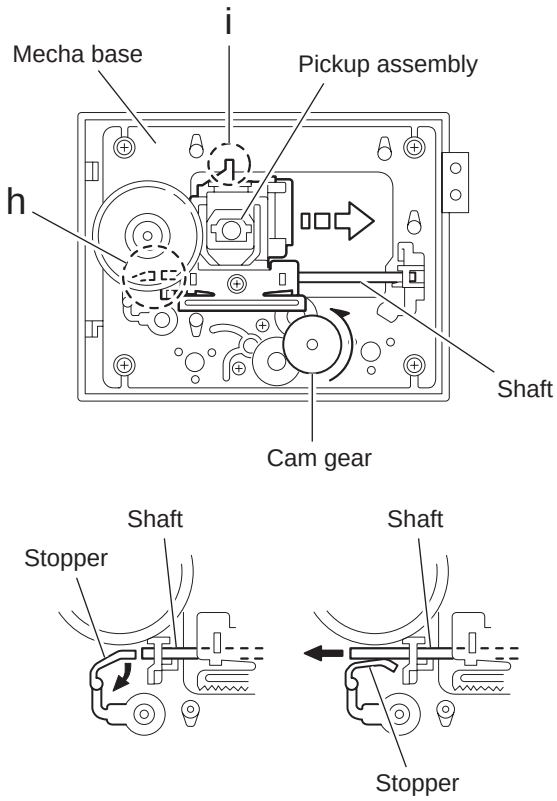


Fig.13

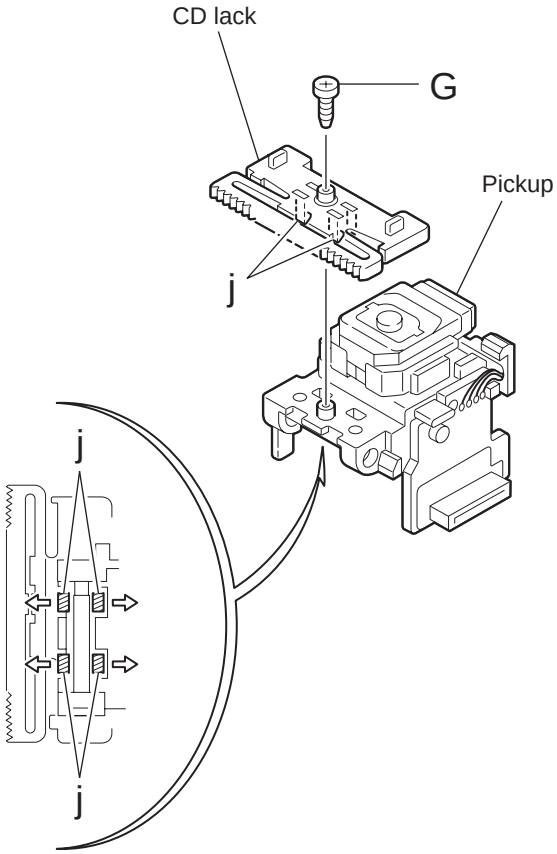


Fig.14

3.3.7 Removing the side (L)/ tray switch board (See Fig.15 ~ 17)

- Prior to performing the following procedure, remove the tray assembly.
  (1) Remove the two screws **H** attaching the side (L) on top of the body.
  (2) From the side of the body, remove the spacer fixing the tray switch board and motor board. Disconnect connector CN3 on the tray switch board and detach the side (L) upward.
  (3) Remove the screw **J** attaching the tray switch board.
  (4) Push the joint tab **k** of the side (L) in the direction of the arrow and remove the tray switch board outward, then release joint **l**.

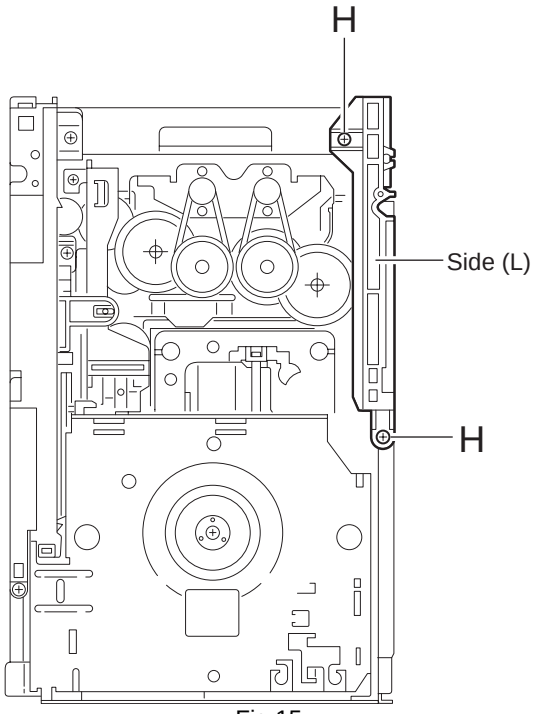


Fig.15

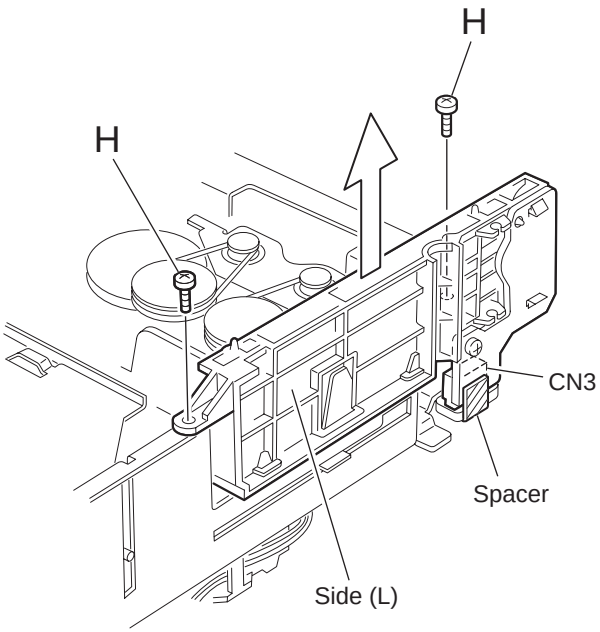


Fig.16

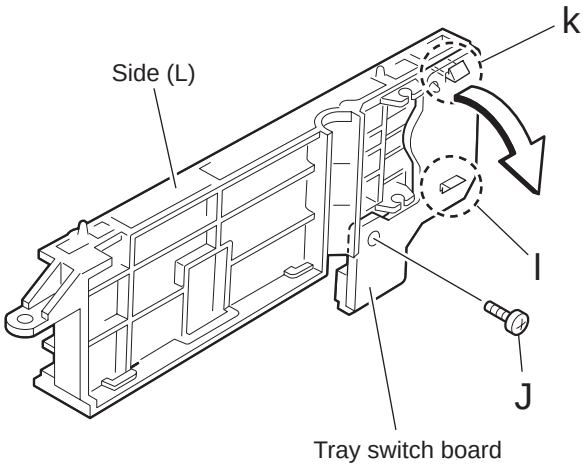


Fig.17

3.3.8 Removing the side (R) assembly (See Fig.18 ~ 22)

- Prior to performing the following procedure, remove the tray assembly.
  (1) Push and release the two tabs **m** of the gear cover through the two notches inside the side (R) assembly. Remove the gear cover outward.
  (2) Remove the spring attached to part **n** of the hook on the right side of the body.
  (3) From top of the body, turn the 1 gear clockwise to move the elevator cam rearward.Move the two slots **o** and joint **p** of the elevator cam as shown in Fig.21 and remove the elevator cam outward.
  (4) Remove the three screws **K** and detach the side (R) upward.

Caution:

When reattaching the side (R) assembly, make sure to fit the shaft(part **q**) into the slot of the select lever.

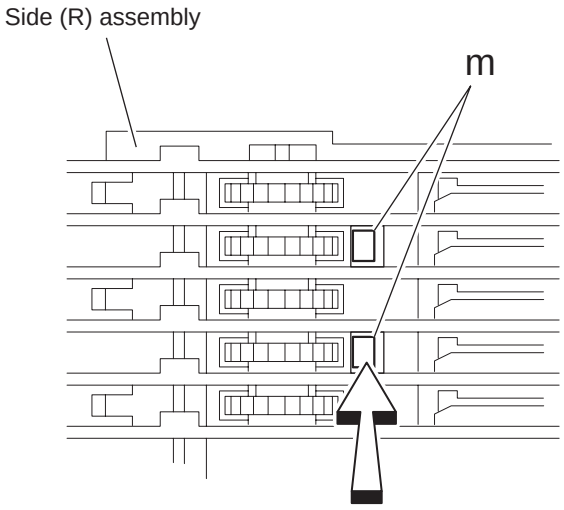


Fig.20

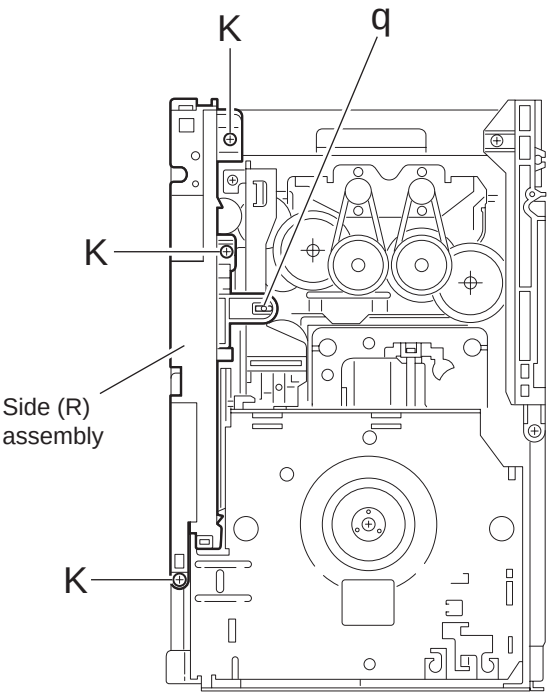


Fig.18

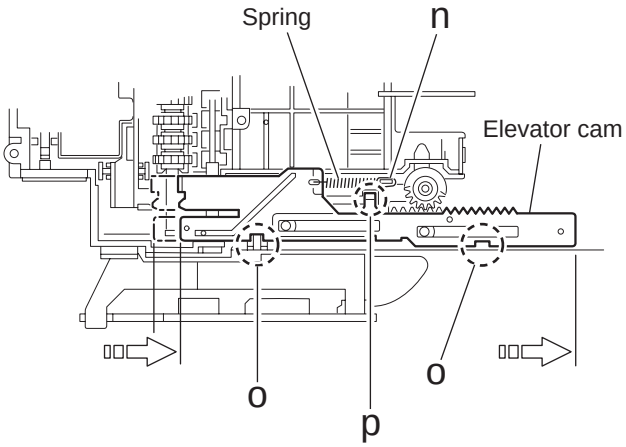


Fig.21

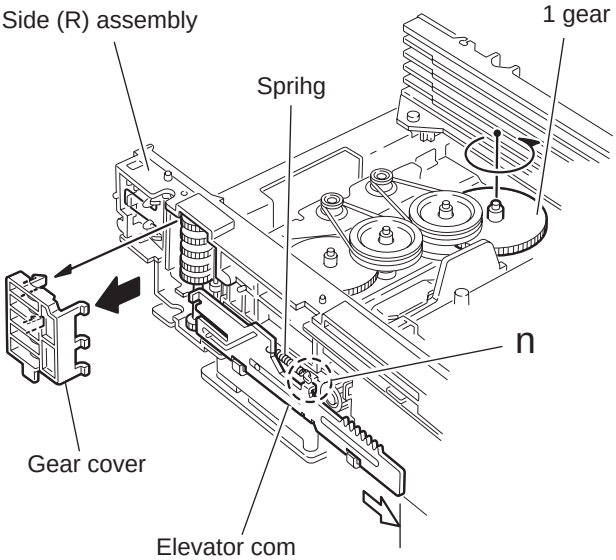


Fig.19

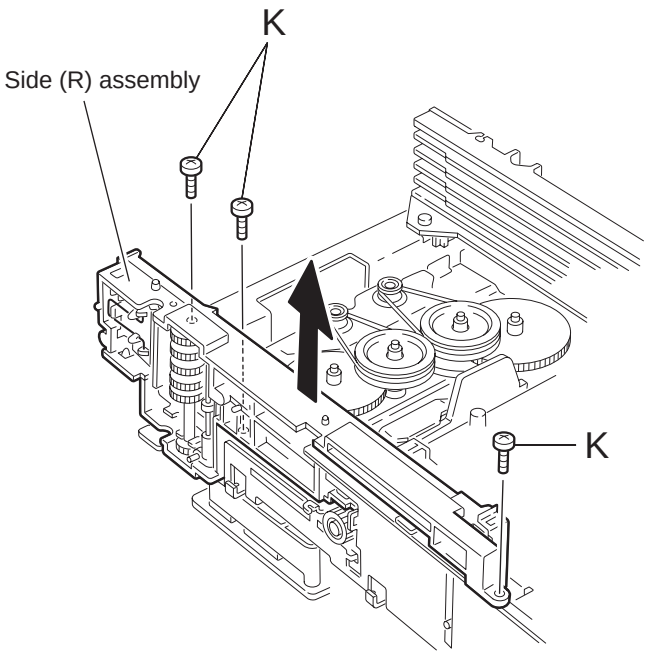


Fig.22

3.3.9 Removing the lifter assembly (See Fig.23 ~ 27)

- Prior to performing the following procedure, remove the tray assembly and side (L)/ side (R) assembly.
  (1) From top of the body, turn the 1 gear clockwise to move the lifter assembly upward as shown in Fig.24.
  (2) From top of the body, turn the 2 gear clockwise to move the hook toward the front until it stops.
  (3) Move the hook stopper in the direction of the arrow while pushing the tab **r** of the hook stopper to unlock it. Release four joints **s** to detach from the rack holder.
  Release the rod from part t.
  (4) Turn the 1 gear clockwise again to move the lifter assembly upward.
  (5) Remove the lifter assembly from the body upward at position **u** where the four pins on the right and left sides of the lifter assembly fit to the notches of the **v**.
  Move the lifter assembly toward the front and release from the hook.

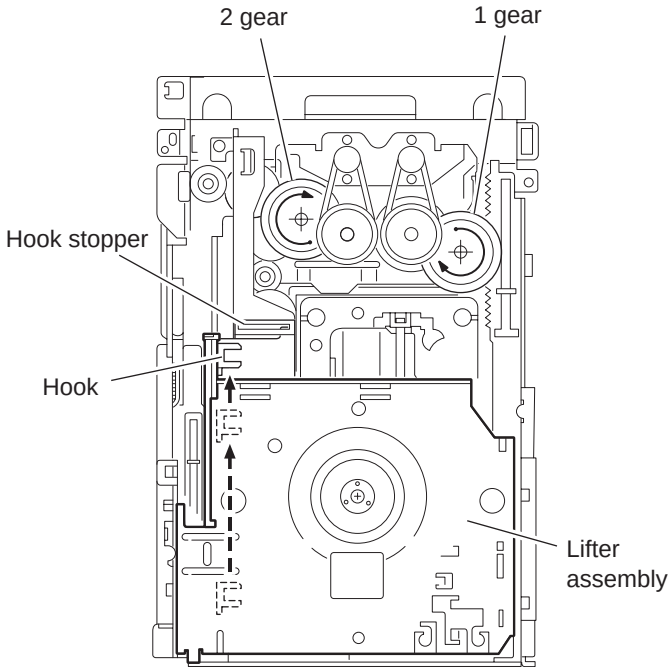


Fig.23

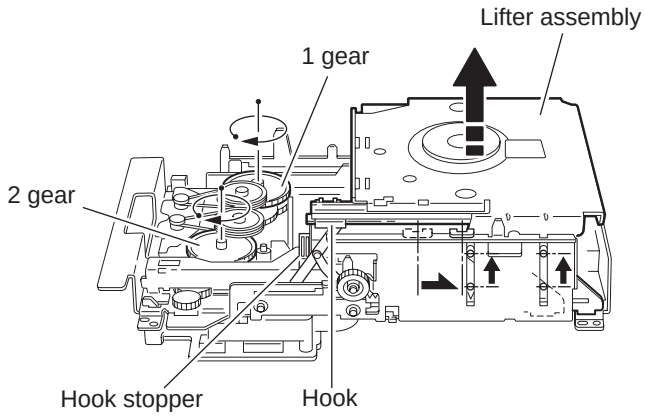


Fig.24

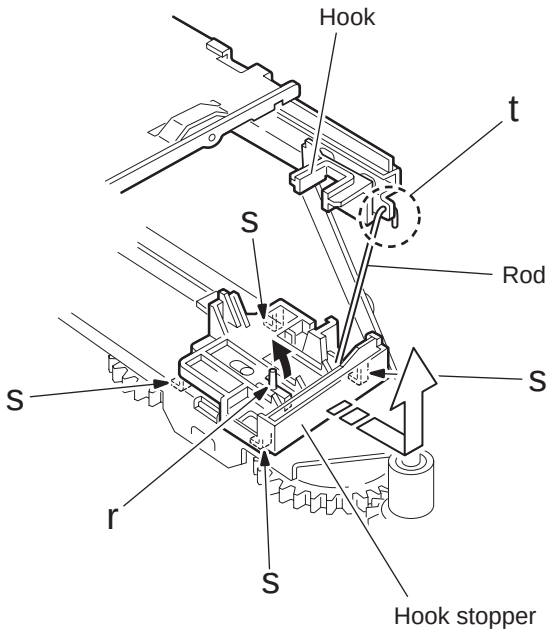


Fig.25

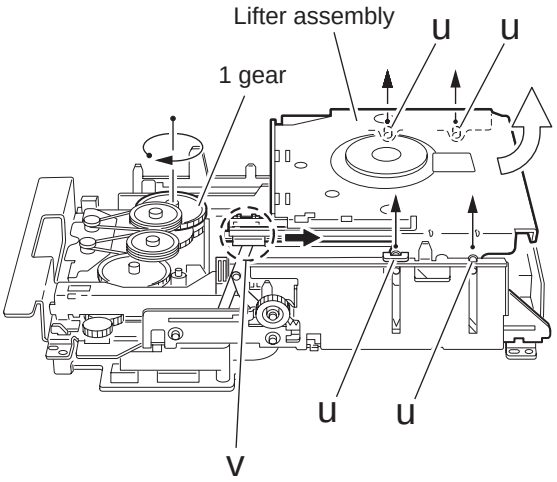


Fig.26

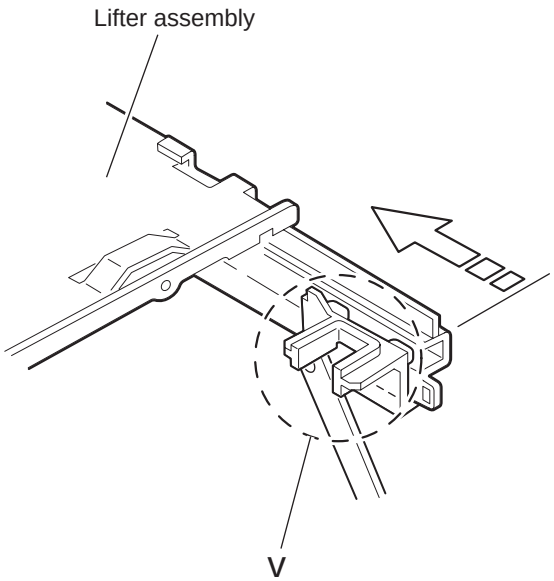


Fig.27

3.3.10 Removing the rack holder assembly/ sensor assembly (See Fig.28 ~ 33)

- Prior to performing the following procedure, remove the tray assembly, side (L)/ side (R) assembly, lifter assembly.

Attention:

If the slide gear of the body places at joint **w** of the rack holder assembly, turn the 1 gear counterclockwise to move the slide gear toward the front. Remove the rack holder assembly.

(1) Remove the three screws **J** attaching the rack holder assembly. Release joint **w** from the notch.

Caution:

When reattaching the rack holder assembly, do not nip the wire x extending from the sensor assembly.

(2) Remove the two screws **M** attaching the sensor assembly.

(3) Move the sensor assembly in the direction of the arrow to release from the slot at joint **y**.

(4) Remove the spring attached to the bottom of the sensor assembly from the boss **z** on the sensor slider.

(5) Remove the screw **N** and **O** attaching the sensor board and SV resister respectively.If necessary, unsolder the sensor board.

Caution:

When reattaching the SV resister, attach the sensor slider to the sensor bracket and fit the lever on the bottom of the SV resister into slot **a'** of the sensor slider.

Caution:

When reattaching the rack holder assembly, turn the 1 gear clockwise to move the slide gear and slide lever inside the body rearward.

- Let the wire extending from the sensor assembly through notch **x** to the bottom of the body.
- Fit pin **c'**of the slide lever into hole **b'** of the sensor slider on the bottom of the sensor assembly while attaching the spring to the boss **z** of the sensor slider.
- Engage joint **y** of the sensor assembly to the notch of the body.

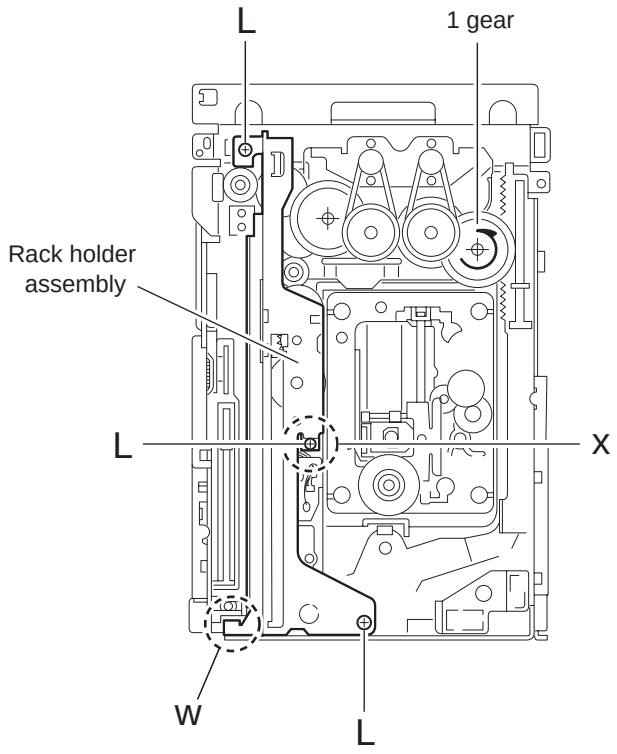


Fig.28

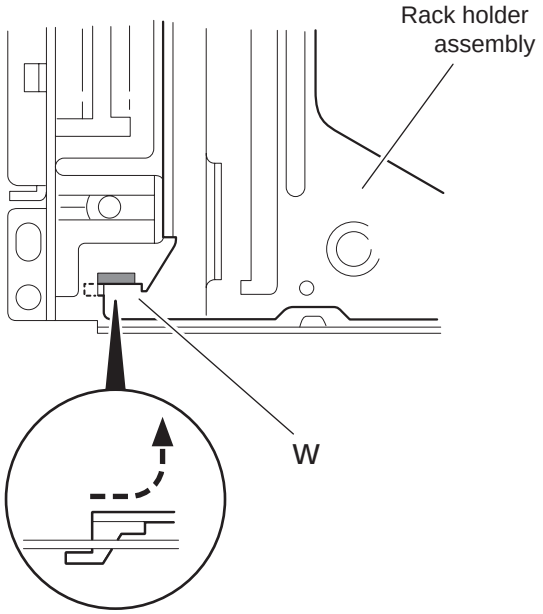
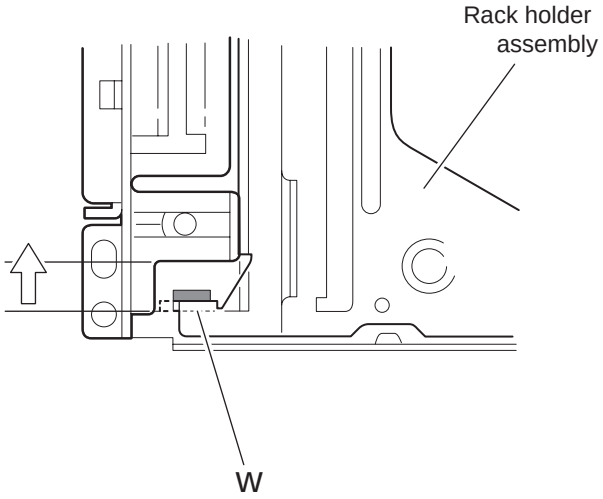


Fig.29



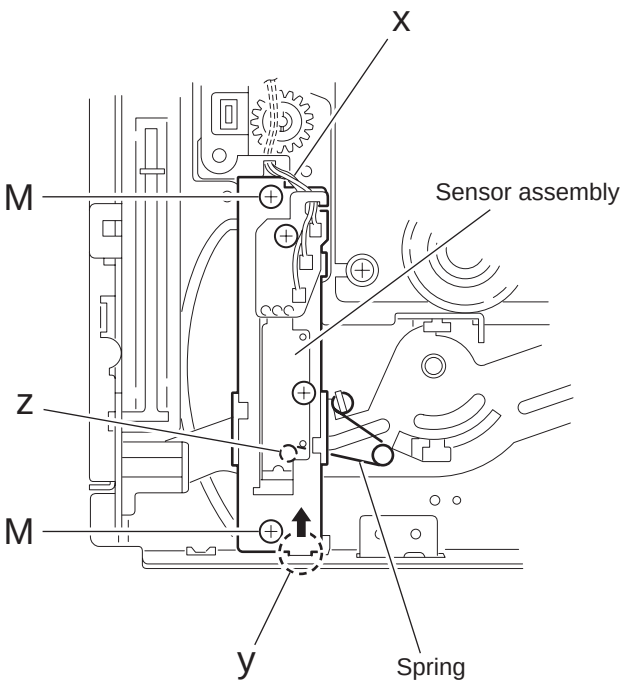


Fig.30

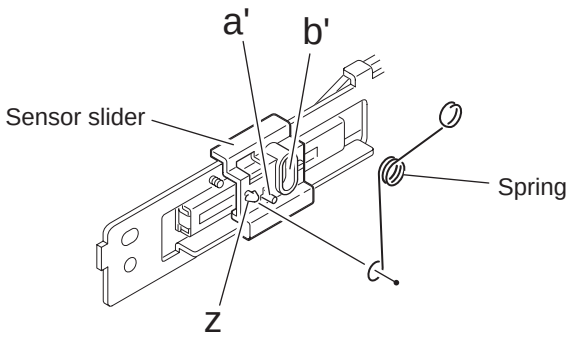


Fig.31

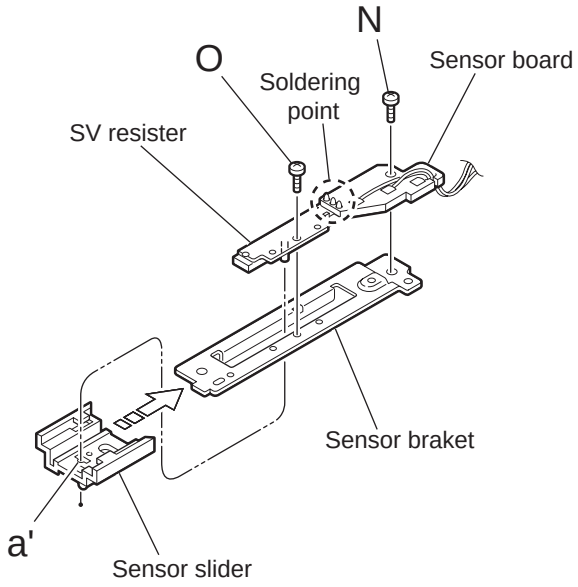


Fig.32

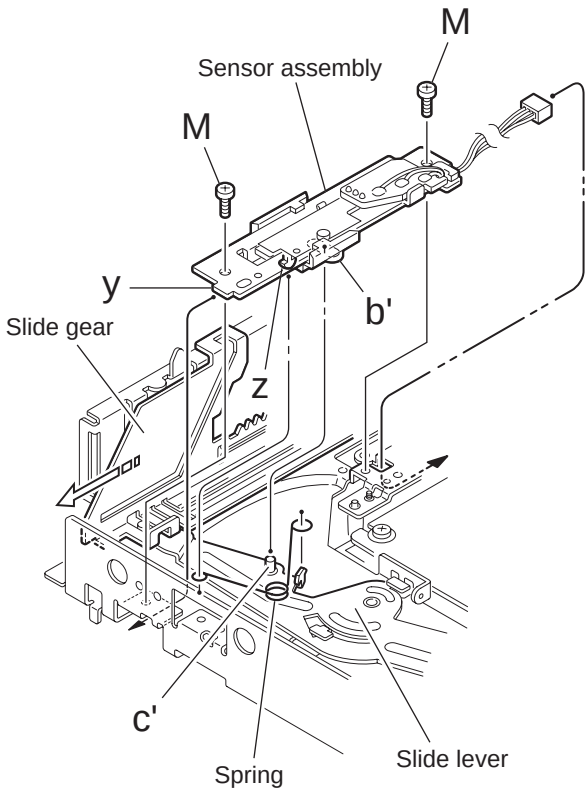


Fig.33

3.3.11 Removing the motor
(See Fig.34 ,35)

- Prior to performing the following procedure, remove the servo control board and top cover.

Attention:

You need not to remove the tray assembly, and in such case, move it.

(1) Remove the two belts on top of the body.
(2) Remove the four screws **N** attaching the motor.
(3) Remove the motor board from the bottom of the body. (Refer to the section “Removing the motor board”.)

Attention:

When removing the motor board with the motor, you need not to unsolder four soldered parts.

Caution:

When reattaching the motor, turn the side where the label should be put to the front side.

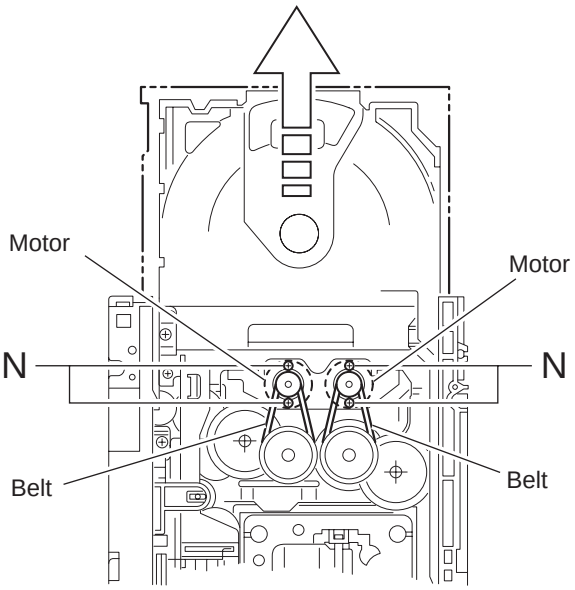


Fig.34

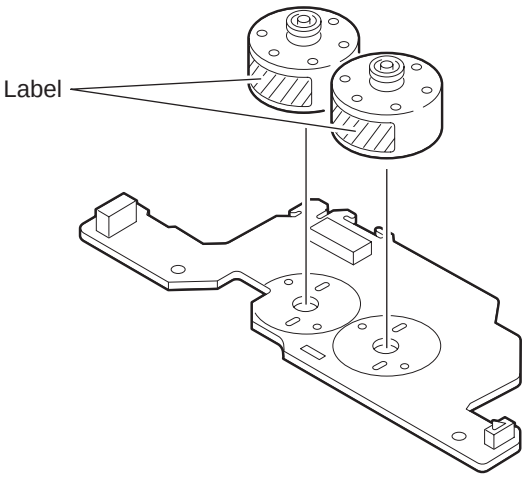


Fig.35

3.3.12 Taking out the CD in play mode (See Fig.36 ~ 39)

Attention:

Refer to “Removing the tray assembly”.

(1) Remove the top cover upward.

(2) Unlock the tray assembly and draw out the tray assembly toward the front.

(3) From top of the body, turn the 1 gear clockwise to move the lifter assembly upward.

(4) From top of the body, turn the 2 gear clockwise to move the sub tray remaining inside the lifter assembly toward the front, then pull out.

(5) Take out the CD on the sub tray.

(6) After clearing away the CD, insert the sub tray into the main tray.

Caution:

When reattaching the sub tray, move the tray stopper on the bottom of the main tray in the direction of the arrow to lock the sub tray certainly.

(7) Push the tray assembly toward the body and reattach.

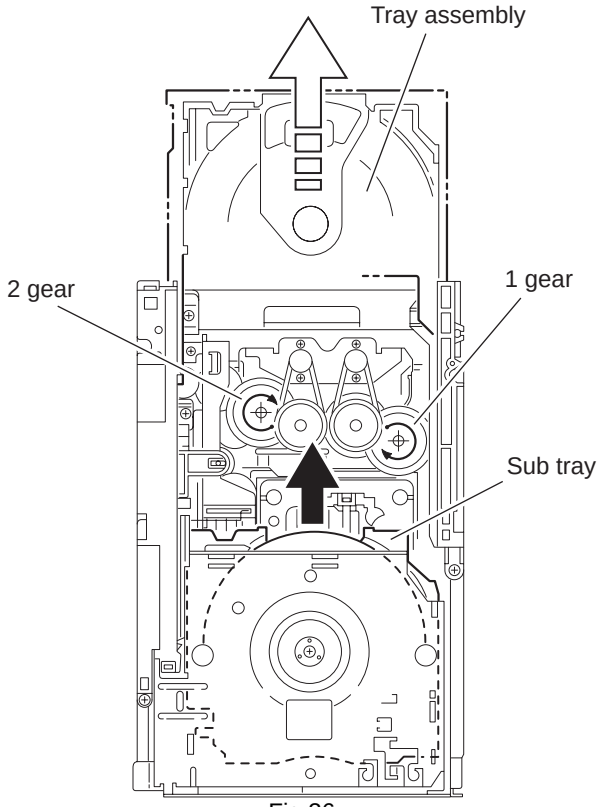


Fig.36

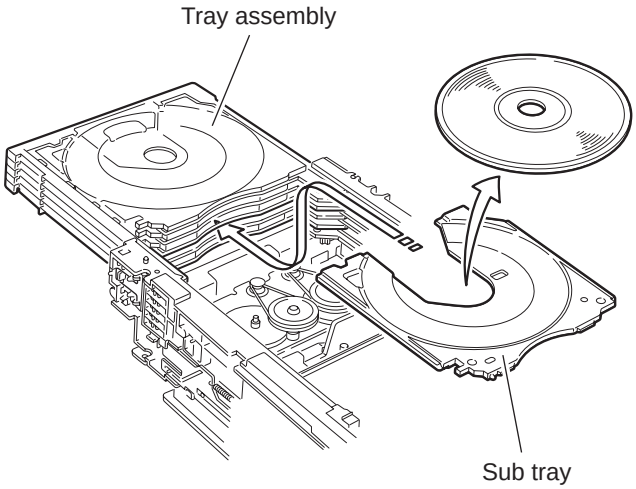


Fig.37

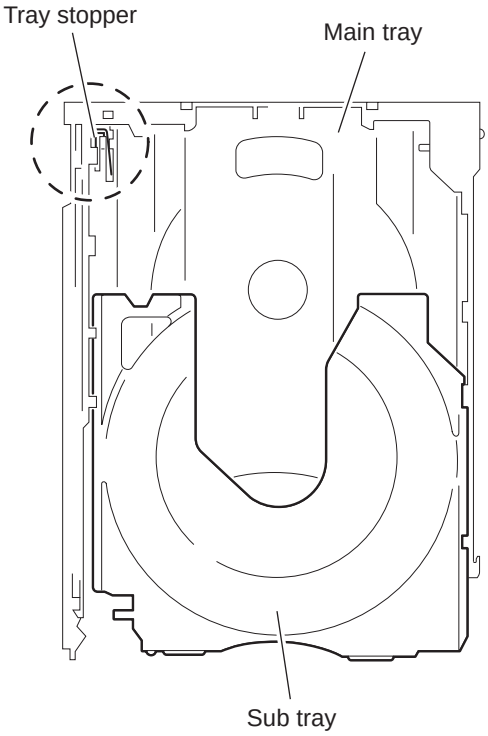


Fig.38

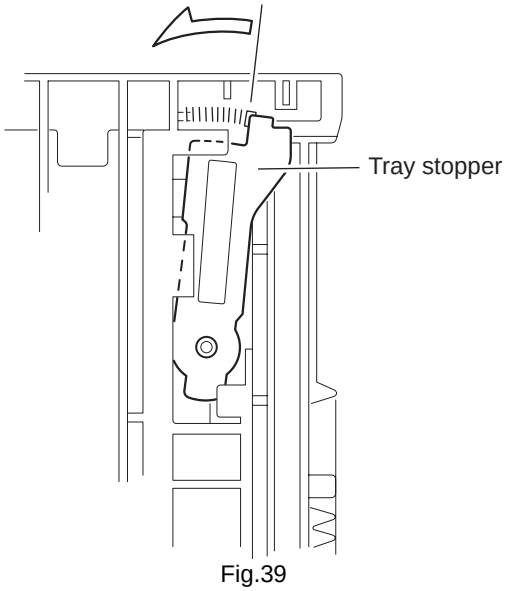


Fig.39

3.4 Cassette mechanism assembly

3.4.1 Removing the Play/Record & Clear head (See Fig.1~3)

(1) While moving the trigger arm on the right side of the head mount in the direction of the arrow, turn the flywheel R counterclockwise until the head mount comes ahead and clicks.
(2) The head turns counterclockwise as you turn the flywheel R counterclockwise (See Fig.2 and 3).
(3) Disconnect the flexible wire from connector CN31 on the head amplifier & mechanism control board.
(4) Remove the spring from the back of the head.
(5) Loosen the azimuth screw for reversing attaching the head.
(6) Remove the head on the front side of the head mount.

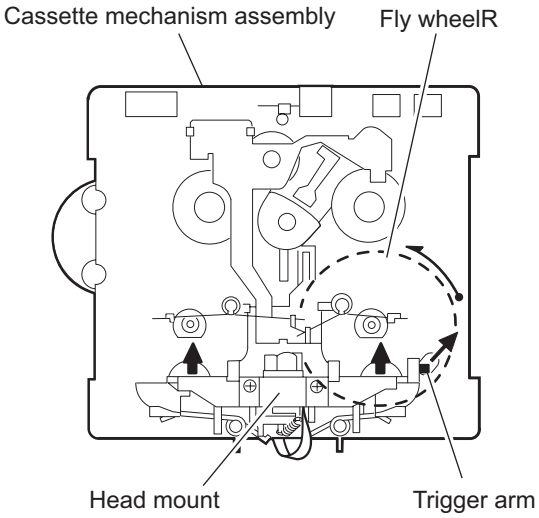


Fig.1

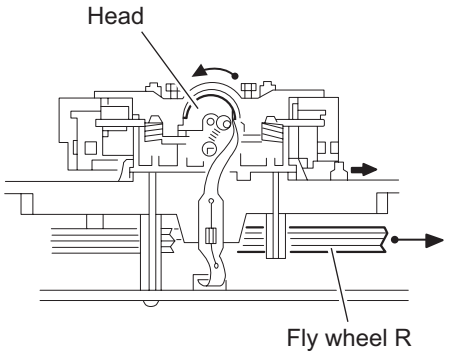


Fig.2

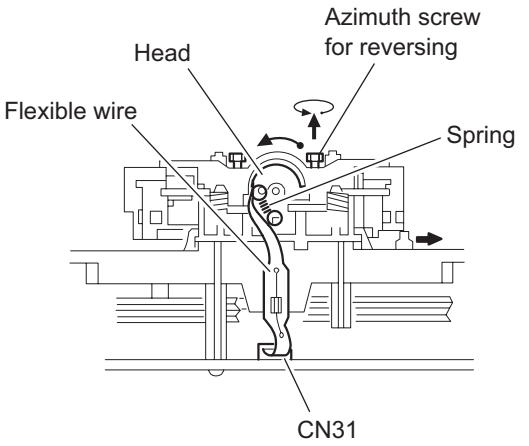


Fig.3

3.4.2 Removing the head amplifier & mechanism control board (See Fig.4)

(1) Turn over the cassette mechanism assembly and remove the three screws **A** attaching the head amplifier & mechanism control board.
(2) Disconnect the flexible wire from connector CN31 on the head amplifier & mechanism control board.
(3) Disconnect connector CN32 of the head amplifier & mechanism control board from connector CN1 on the reel pulse board.REFERENCE: If necessary, unsolder the 4-pin wire soldered to the main motor.

3.4.3 Removing the main motor (See Fig.4~7)

(1) Remove the two screws **B** .
(2) Half raise the motor and remove the capstan belt from the motor pulley.

ATTENTION:

Be careful to keep the capstan belt from grease. When reassembling, refer to Fig.6 and 7 for attaching the capstan belt.

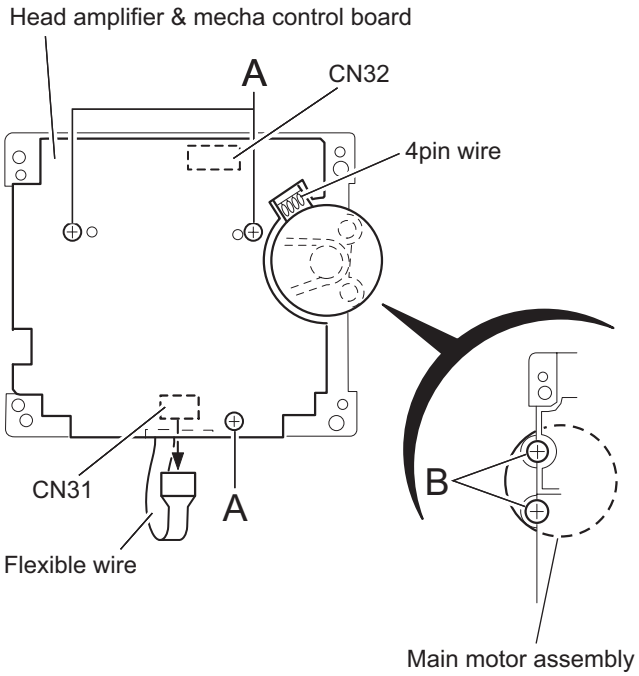


Fig.4

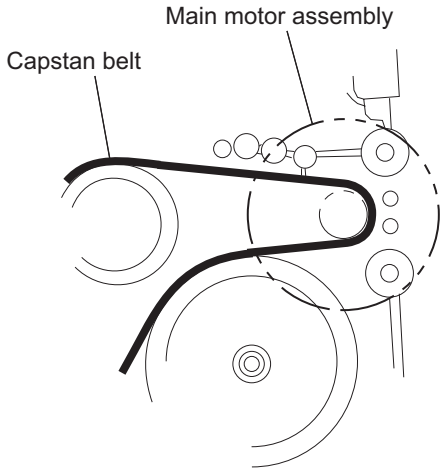


Fig.5

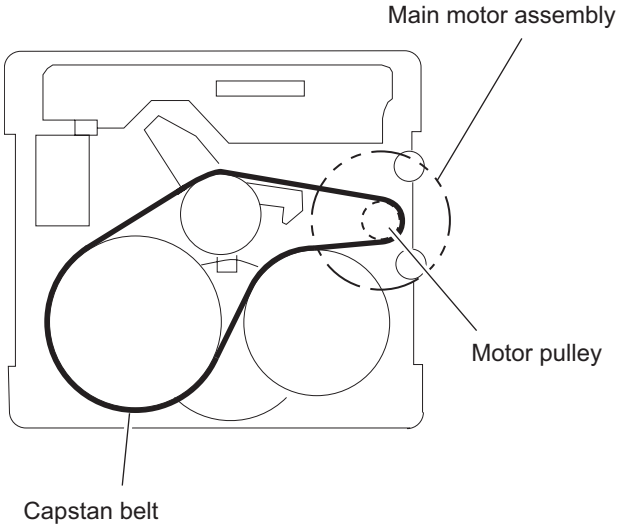


Fig.6

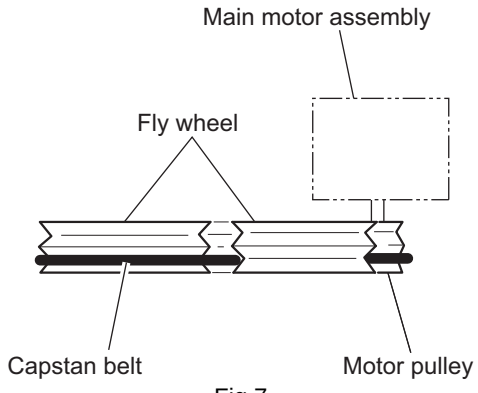


Fig.7

3.4.4 Removing the flywheel (See Fig.8, 9)

- Prior to performing the following procedure, remove the head amplifier & mechanism control board and the main motor assembly.
  (1) From the front side of the cassette mechanism, remove the slit washers attaching the capstan shaft **L** and **R**. Pull out the flywheels backward.

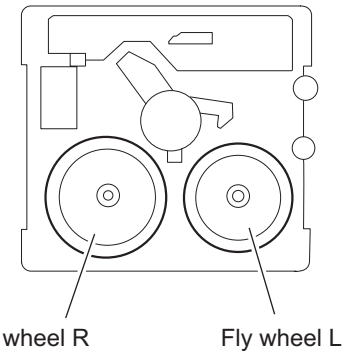


Fig.8

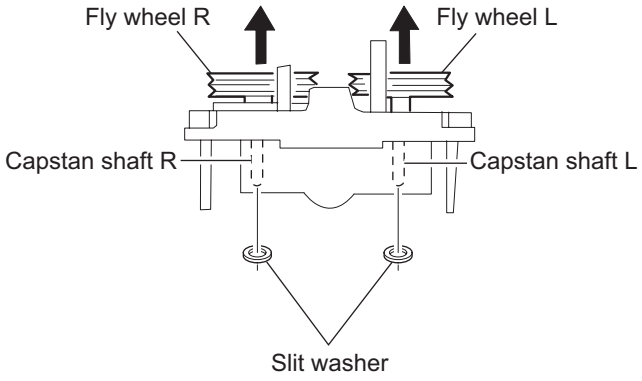


Fig.9

3.4.5 Removing the reel pulse board and solenoid (See Fig.10)

- Prior to performing the following procedure, remove the head amplifier & mechanism control board.
  (1) Remove the screw **C**.
  (2) Release the tab **a**, **b**, **c**, **d** and **e** retaining the reel pulse board.
  (3) Release the tab **f** and **g** attaching the solenoid on the reel pulse board.
  (4) The reel pulse board and the solenoid come off.

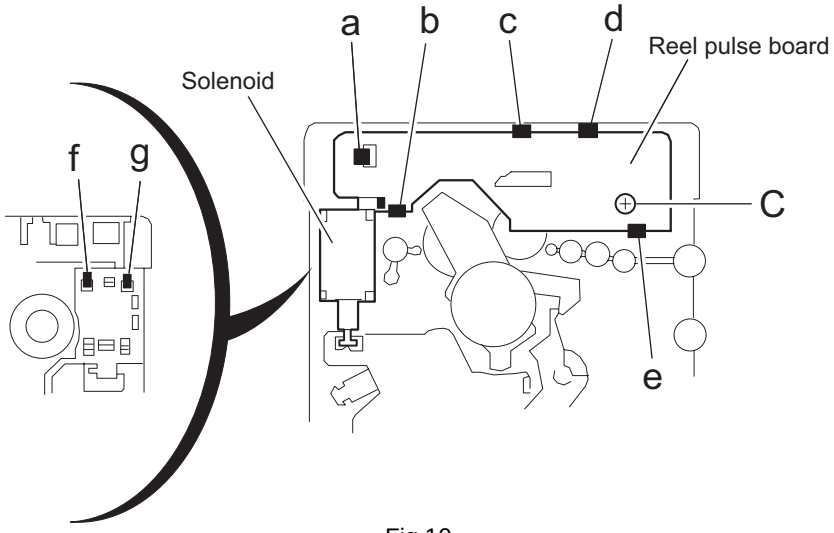


Fig.10

3.4.6 Reattaching the Play/ Record & Clear head (See Fig.11~13)

(1) Reattaching the head mount assembly.
   a) Change front of the direction cover of the head mount assembly to the left (Turn the head forward).
   b) Fit the bosses **O'**, **P'**, **Q'**, **U'** and **V'** on the head mount assembly to the holes **P** and **V**, the slots **O**, **U** and **Q** of the mechanism sub assembly (See Fig.11 to 13).

CAUTION:

To remove the head mount assembly, turn the direction cover to the left to disengage the gear. If the gear can not be disengaged easily, push up the boss **Q'** slightly and raise the rear side of the head mounts slightly to return the direction lever to the reversing side.

(2) Tighten the azimuth screw for reversing.
(3) Reattach the spring from the back of the Play/ Record & Clear head.
(4) Connect the flexible wire to connector CN31 on the head amplifier & mechanism control board.

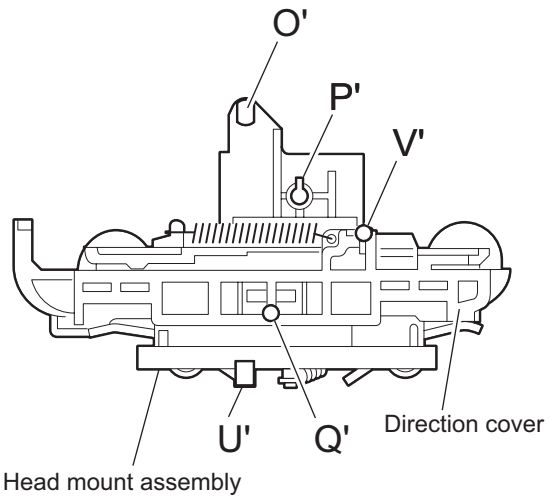


Fig.11

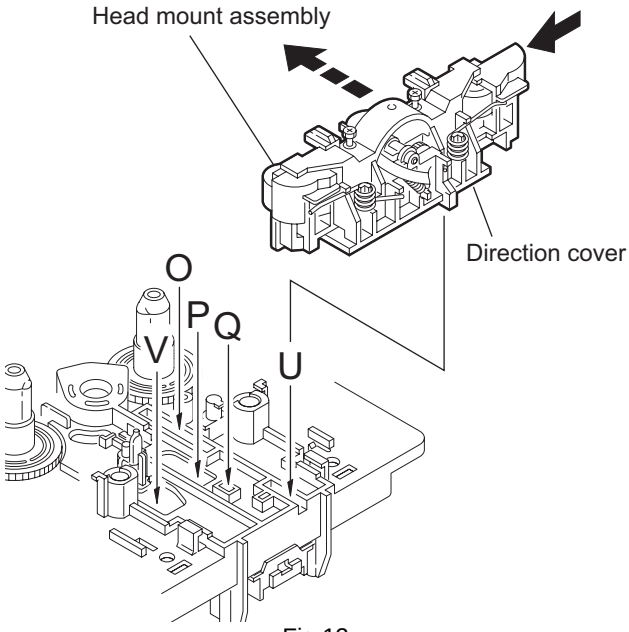


Fig.12

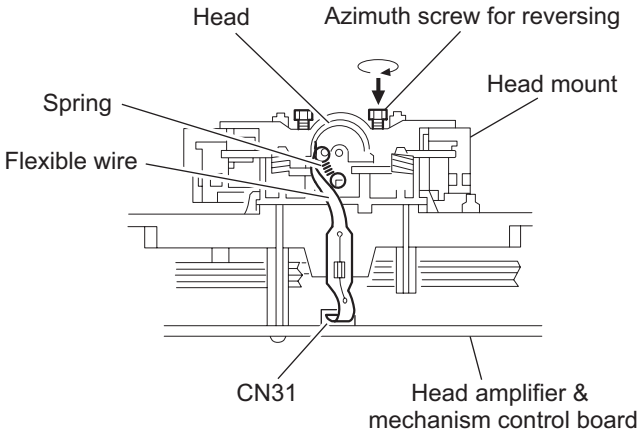


Fig.13

3.5 Speaker section

3.5.1 Removing the Side cover (See Fig.1)

(1) Removing the eight screws **A** on the side of the body.

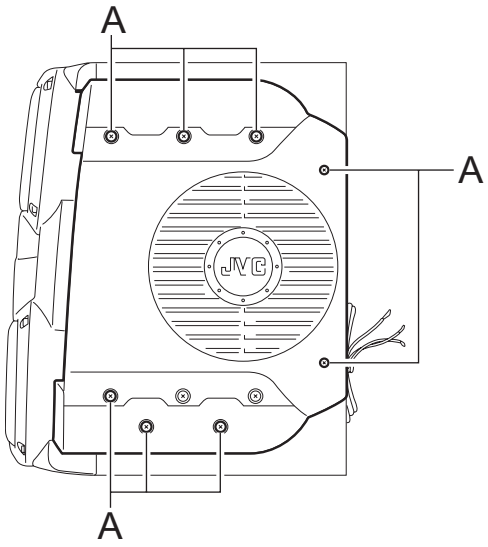


Fig.1

3.5.2 Removing the sub woofer (See Fig.2)

- Prior to performing the following procedure, remove the side cover.

(1) Remove the six screws **B** attaching the sub woofer on the side of the body.

(2) Disconnect the red and black wires from the two terminals on the sub woofer.

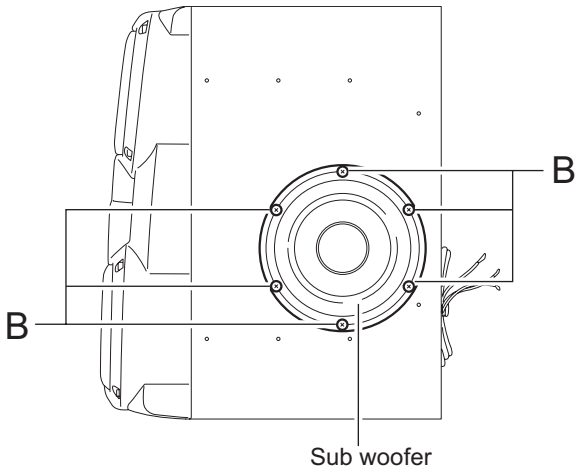


Fig.2

3.5.3 Removing the Front panel (See Fig.3, 4)

- Prior to performing the following procedure, remove the side cover.

CAUTION:

When removing the front panel from the body, do not break or damage them that are glued at the joint a (See Fig.3).

(1) Remove the four screws **C** attaching the front panel.
(2) Release the four joints **a**.
(3) Disconnect the yellow and black wires from the two terminals on the tweeder on the back of the front panel.

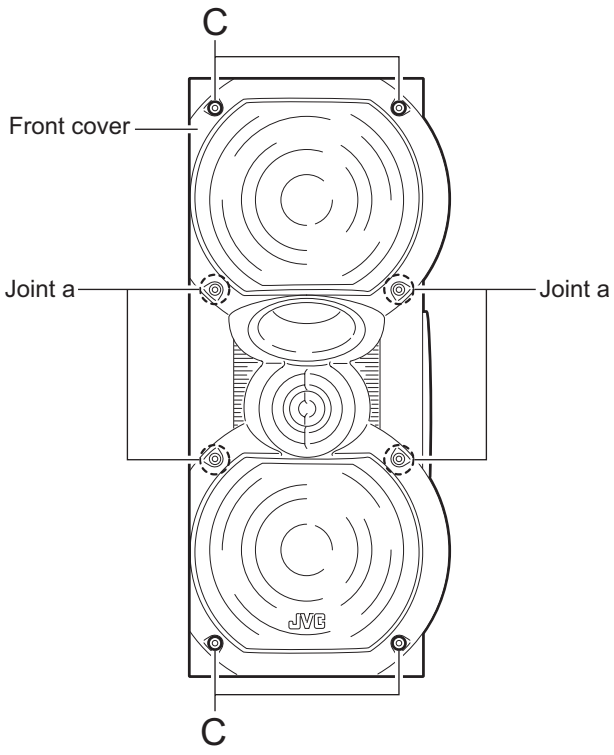


Fig.3

3.5.4 Removing the tweeter (See Fig.4)

- Prior to performing the following procedure, remove the side cover and the front panel.

(1) Remove the two screws **D** attaching the tweeter on the back of the front panel.

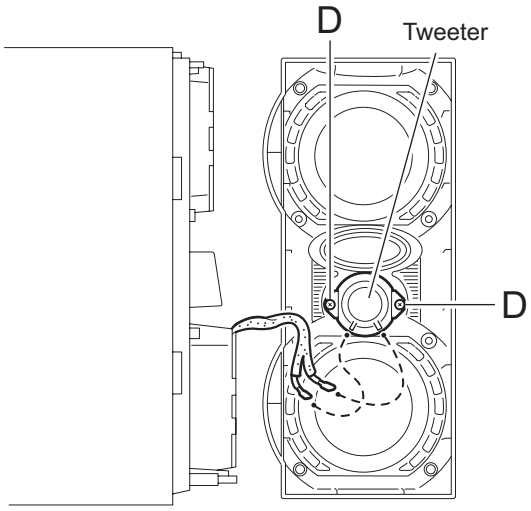


Fig.4

3.5.5 Removing the woofer (See Fig.5)

- Prior to performing the following procedure, remove the side cover and the front panel.
  (1) Remove the four screws **E** attaching the woofer.
  (2) Disconnect the red and black wires from the two terminals on the woofer.

3.5.6 Removing the woofer (See Fig.5)

- Prior to performing the following procedure, remove the side cover and the front panel.
  (1) Remove the four screws **F** attaching the woofer.
  (2) Disconnect the three black wires and the black, red and blue wires from the two terminals on the woofer respectively.

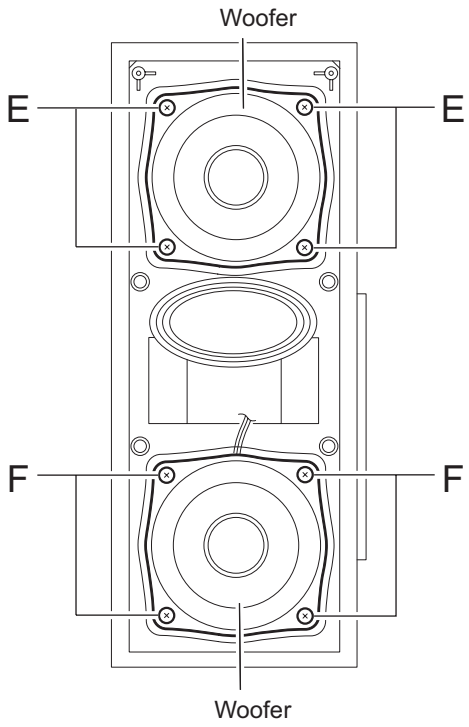


Fig.5

SECTION 4
ADJUSTMENT

4.1 Measurement Instruments Required for Adjustment

(1) Low frequency oscillator
This oscillator should have a capacity to output 0dBs to 600Ω at an oscillation frequency of 50Hz-20kHz.
(2) Attenuator impedance : 600Ω
(3) Electronic voltmeter
(4) Distortion meter
(5) Frequency counter
(6) Wow & flutter meter
(7) Test tape
VT703L : Head azimuth
VT712 : Tape speed and running unevenness (3kHz)
VT724 : Reference level (1kHz)
(8) Blank tape
TYPE Ⅰ : AC-225
TYPE Ⅱ : AC-514
(9) Torque gauge : For play and back tension
FWD(TW2111A), REV(TW2121a) and FF/REW(TW2231A)
(10) Test disc: CTS-1000

4.2 Measurement conditons

Power supply voltage	AC 120V ~, 60Hz
Reference output	Speaker : 0.775V/4Ω Headphone : 0.077V/32Ω

Reference frequency and input level	1kHz, AUX : -8dBs
Measurement output terminal	at Speaker J3002
Load resistance	4Ω

4.2.1 Radio Input signal

AM frequency	400Hz
AM modulation	30%
FM frequency	400Hz
FM frequency deviation	22.5kHz

4.2.2 Tuner section

FM tuning range: 87.5MHz~108.00MHz
AM tuning range: 530kHz~1,710kHz

Voltage applied to tuner	+B : DC5.7V VT : DC 12V
Reference measurement output	26.1mV(0.28V)/3Ω
Input positions	AM : Standard loop antenna FM : TP1 (hot) and TP2 (GND)

4.2.3 Standard measurement position of volume

Function switch	to Tape
Beat cut switch	to Cut
Super Bass/Active hyper Bass	to OFF
Bass Treble	to Center
Adjustment of main volume to reference output	VOL : 0.775V

Precautions for measurement

(1) Apply 30pF and 33kΩ to the IF sweeper output side and 0.082μ F and 100kΩ in series to the sweeper input side.
(2) The IF sweeper output level should be made as low as possible within the adjustable range.
(3) Since the IF sweeper is a fixed device, there is no need to adjust this sweeper.
(4) Since a ceramic oscillator is used, there is no need to perform any MIX adjustment.
(5) Since a fixed coil is used, there is no need to adjust the FM tracking.
(6) The input and output earth systems are separated. In case of simultaneously measuring the voltage in both of the input and output systems with an electronic voltmeter for two channels, therefore, the earth should be connected particularly carefully.
(7) In the case of BTL connection amp., the minus terminal of speaker is not for earthing. Therefore, be sure not to connect any other earth terminal to this terminal. This system is of an BTL system.
(8) For connecting a dummy resistor when measuring the output, use the wire with a greater code size.
(9) Whenever any mixed tape is used, use the band pass filter (DV-12).

When a mechanism or a printed circuit board, it is required to write a mechanism position in E2PROM.

A write-in procedure

step1: Press together the Reverse key (main body) and Clock key of main body at standby condition.

step2: Keep this condition then power switch to turn ON.

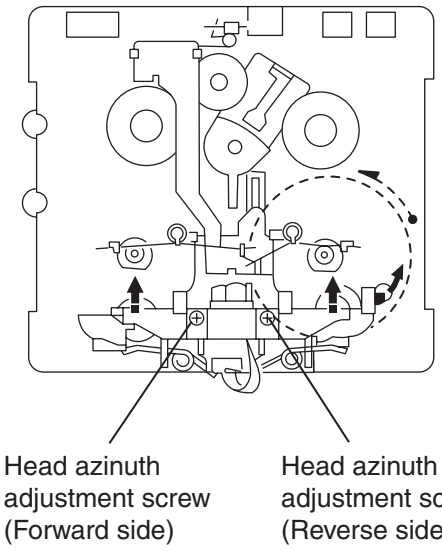
step3: Mechanism done the initialize opelationautomaticaly.

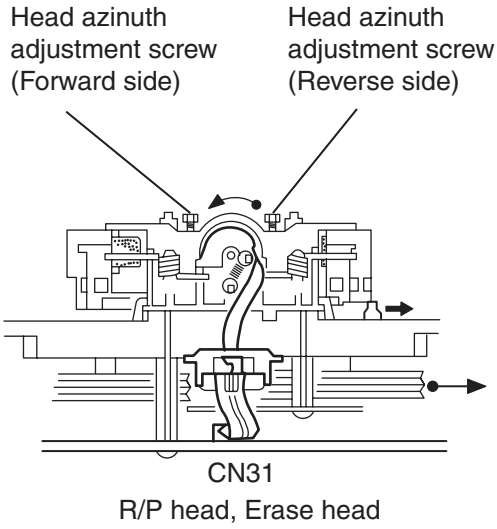
step4: Complete the initialize operation.

step5: Power switch to turn OFF.

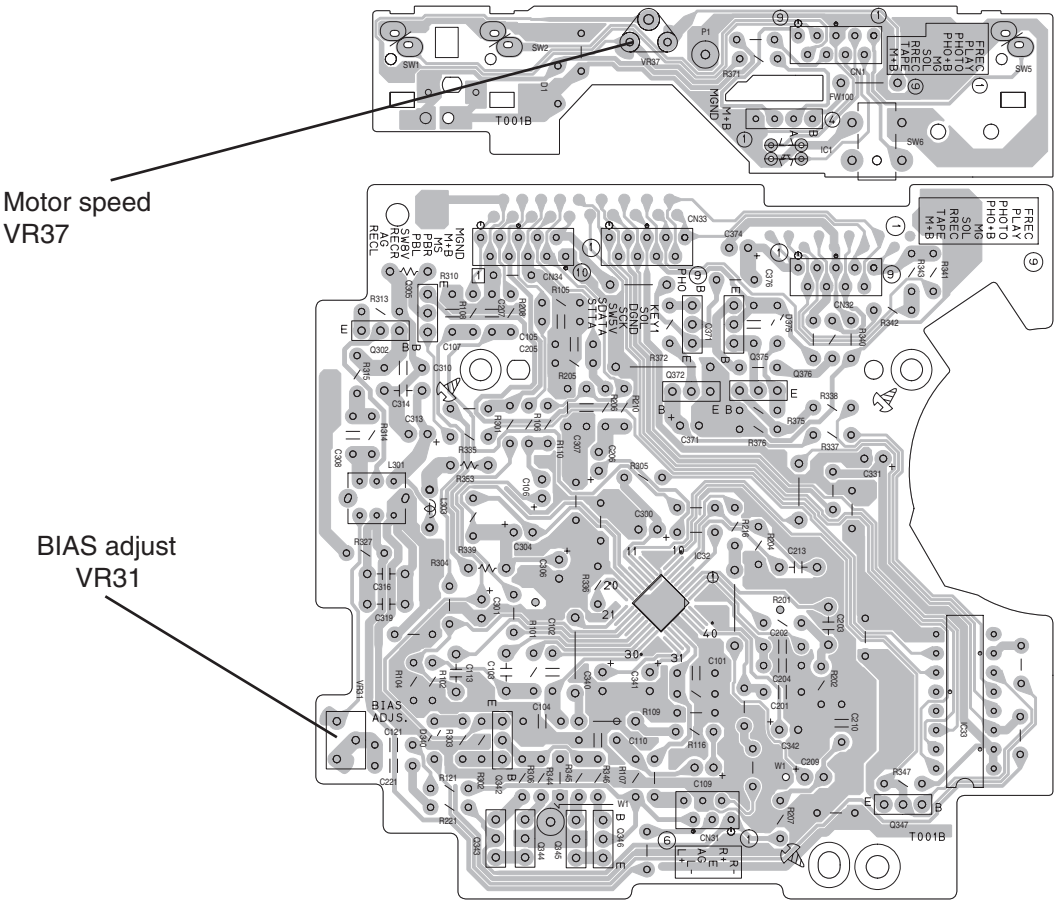
step6: Complete the write-in to E2PROM.

4.4 Cassette mechanism adjustment





Mecha control board



4.5 Mechanism section

Item	Condition	Measurement method	Ref. value	Adjustment position
Head azimuth	Test tape :VT703L (8kHz) Output terminal :Speaker out	(1) Playback the test tape VT703L (8kHz). (2) Adjust to maximum output level by azimuth adjustment screw for forward side and reverse side. (3) This adjustment is adjust by adjustment screw of forward side and adjustment screw of reverse side.	Maximum output	Only adjust at changed head
Tape speed	Test tap :VT712 (3kHz) Output terminal :Speaker out or Headphone out	Playback the test tape VT712 (3kHz) at end of forward side,adjust to 2,940~3,90Hz indication of frequency counter by VR37.	2,940 ~ 3,090Hz	VR37

Item	Condition	Measurement method	Ref. value	Adjustment position
Tape speed diviation at FWD/REV	Test tape : VT712 (3kHz) Output terminal :Speaker out or Headphone out	Playback the test tape VT712 (3kHz) at end of forward and reverse, tape speed deviation should be less than 6.0Hz.	Leass than 6.0Hz	VR31
Wow & Flutter	Test tape : VT712 (3kHz) Output terminal :Speaker out or Headphone out	Playback the test tape VT712 (3kHz) at start of forward and reverse, Wow & Flutter are should be less than 0.25%(WRMS).	Less than 0.25% (WRMS)	

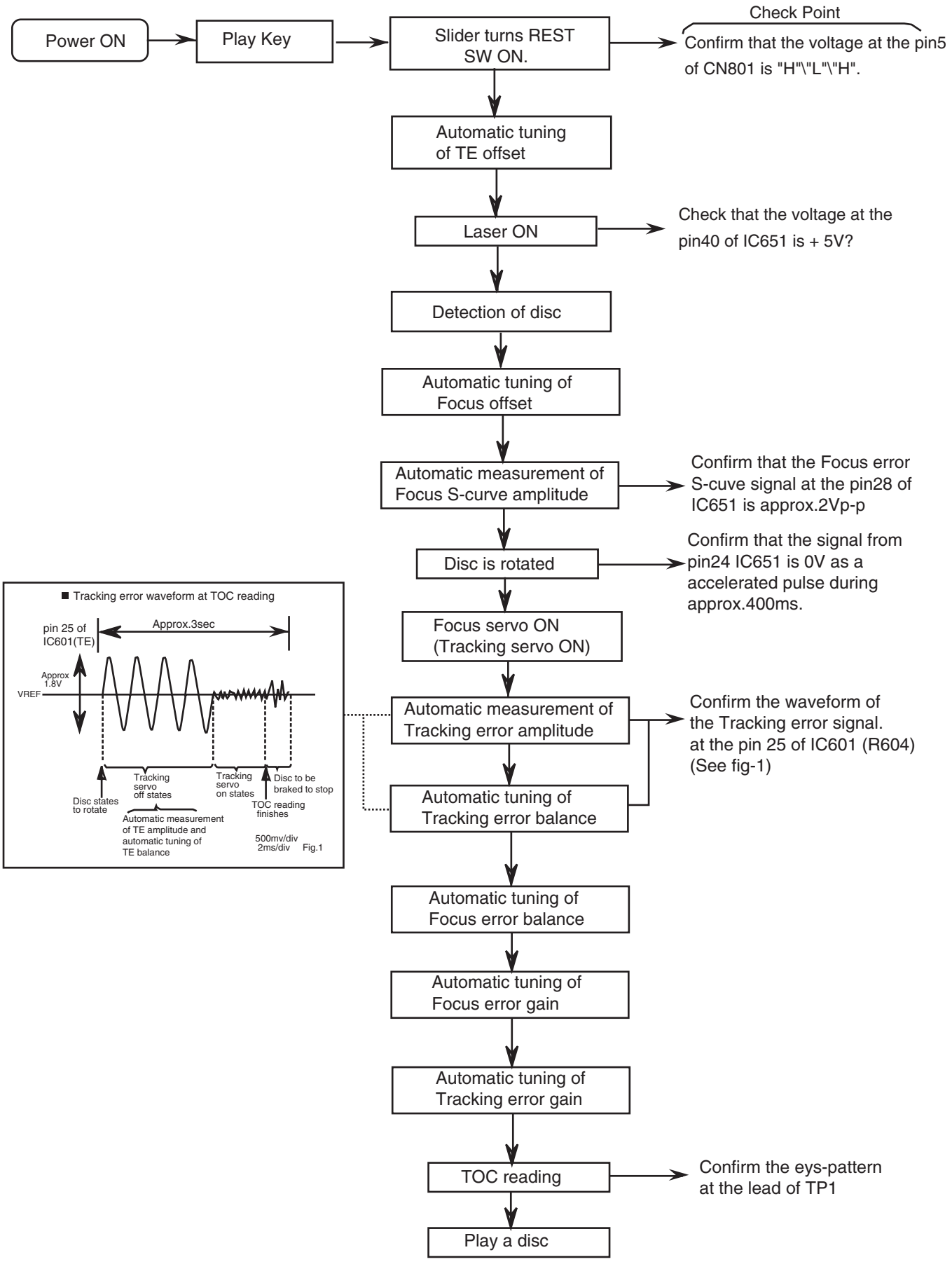
4.5.1 Electrical adjustment

Item	Condition	Measurement method	Ref. value	Adjustment position
Recording BIAS adjustment	• Forward or Reverse • Test tape : AC-514 TYPE ll : AC-225 TYPE l • Output terminal Recording head	(1) Set the test tape(AC-514 TYPE ll and AC-225 TYPE l), then make REC/PAUSE condition. (2) Connect 100Ω to recording head by series, then connect to VTVM for measurement the current. (3) After setting, start the recording by release the PAUSE, in this time bias current adjust to next fig. by VR31 for Lch and VR32 for Rch. 4.0 µA (TYPE ll) and 4.20 µA (TYPE l).	AC-225 : 4.20µA AC-514 : 4.0µA	VR31
R/P playback frequency response	• Reference frequency : 1kHz / 10kHz (Reference: -20dB) • Test tape : AC-514 TYPE ll • Input terminal : OSC IN	(1) Set the test tape (AC-514 TYPE), then make REC/PAUSE condition. (2) Release the PAUSE, then start recording the 1kHz and 10kHz of reference frequency from oscillator. (3) Playback the recorded position, 1kHz and 10kHz output deviation should -1dB 2dB to readjust by VR31 for Lch and VR32 for Rch.	Output deviation 1kHz/10kHz : -1dB ± 2dB	VR31

4.5.2 Electrical response confirmation

Item	Condition	Measurement method	Ref. value	Adjustment position
Recording bias current	• Forward or Reverse • Test tape : TYPE ll (AC-514) • Measurement terminal : BIAS test point on printed circuit board	(1) Change BIAS1 and 2, confirm the frequency should be change. (2) Set the test tape (AC-514 TYPE ll), then make REC/PAUSE condition. (3) Confirm the frequency should 100Hz ± 6kHz at BIAS test point on printed circuit board.	100 kHz ± 6 kHz	
Erase current (reference value)	• Forward or Reverse • Rec condition Test tape : AC-514 TYPE ll : AC-225 TYPE l • Measurement terminal Both side of Erase head	(1) Set the test tape (AC-514 TYPE ll and AC-225 TYPE l), then make REC/PAUSE condition. (2) Release the PAUSE to REC condition, connect 1W to ERASE head by series, then confirm the erase current at both side of erase head.	TYPE ll : 120 mA TYPE l : 75 mA	

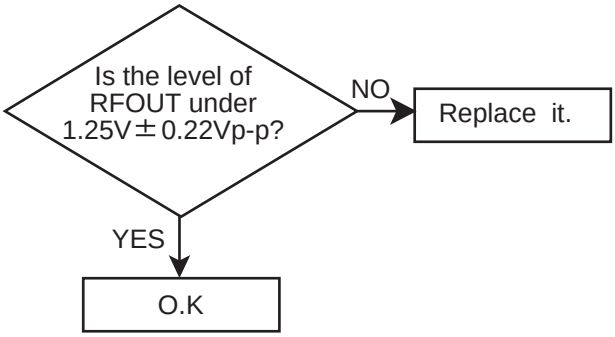
4.6 Flow of functional operation untill TOC read (CD)


Power ON
Play Key
Slider turns REST SW ON.
Check Point
Confirm that the voltage at the pin5 of CN801 is "H"\"L"\"H".
Automatic tuning of TE offset
Laser ON
Check that the voltage at the pin40 of IC651 is + 5V?
Detection of disc
Automatic tuning of Focus offset
Automatic measurement of Focus S-curve amplitude
Confirm that the Focus error S-cuve signal at the pin28 of IC651 is approx.2Vp-p
Disc is rotated
Confirm that the signal from pin24 IC651 is 0V as a accelerated pulse during approx.400ms.
Focus servo ON (Tracking servo ON)
Automatic measurement of Tracking error amplitude
Confirm the waveform of the Tracking error signal. at the pin 25 of IC601 (R604) (See fig-1)
Automatic tuning of Tracking error balance
Automatic tuning of Focus error balance
Automatic tuning of Focus error gain
Automatic tuning of Tracking error gain
TOC reading
Confirm the eys-pattern at the lead of TP1
Play a disc
■ Tracking error waveform at TOC reading
pin 25 of IC601(TE)
Approx.3sec
Approx 1.8V
VREF
Disc states to rotate
Tracking servo off states
Automatic measurement of TE amplitude and automatic tuning of TE balance
Tracking servo on states
TOC reading finishes
Disc to be braked to stop
500mv/div
2ms/div
Fig.1

4.7 Maintenance of laser pickup (CD)

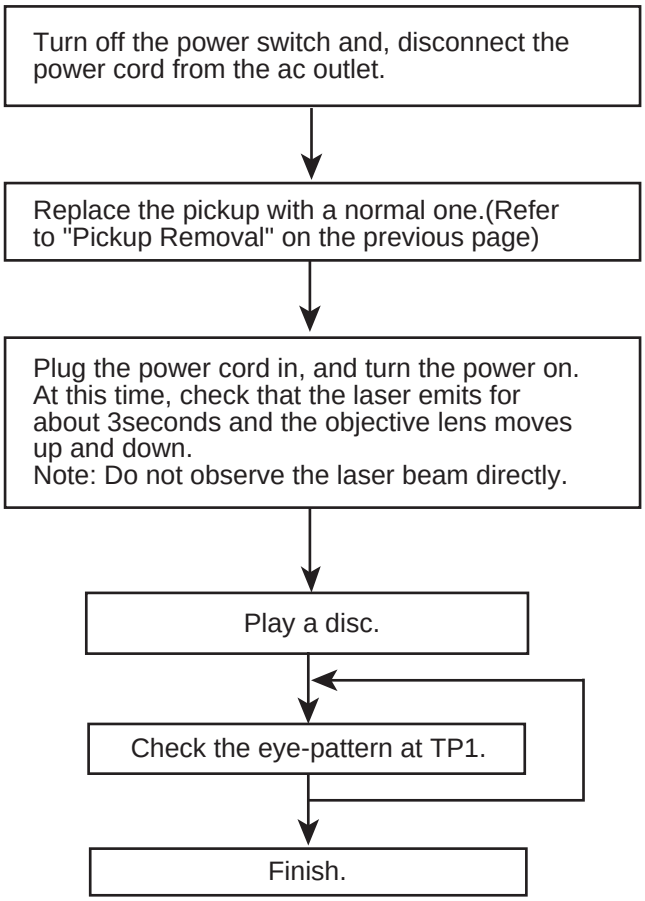
(1) Cleaning the pick up lens
Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

(2) Life of the laser diode
When the life of the laser diode has expired, the following symptoms will appear.
- The level of RF output (EFM output : ampli tude of eye pattern) will below.



(3) Semi-fixed resistor on the APC PC board
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced.
If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

4.8 Replacement of laser pickup (CD)


Turn off the power switch and, disconnect the power cord from the ac outlet.
Replace the pickup with a normal one.(Refer to "Pickup Removal" on the previous page)
Plug the power cord in, and turn the power on. At this time, check that the laser emits for about 3seconds and the objective lens moves up and down.
Note: Do not observe the laser beam directly.
Play a disc.
Check the eye-pattern at TP1.
Finish.

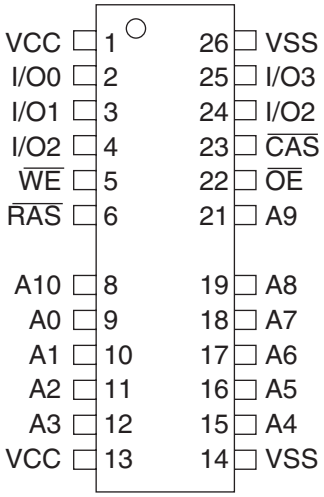
SECTION 5
TROUBLE SHOOTING

This service manual does not describe TROUBLE SHOOTING.

SECTION 6
DESCRIPTION OF MAJOR ICs

6.1 A42L2604V-45L (IC671) : DRAM

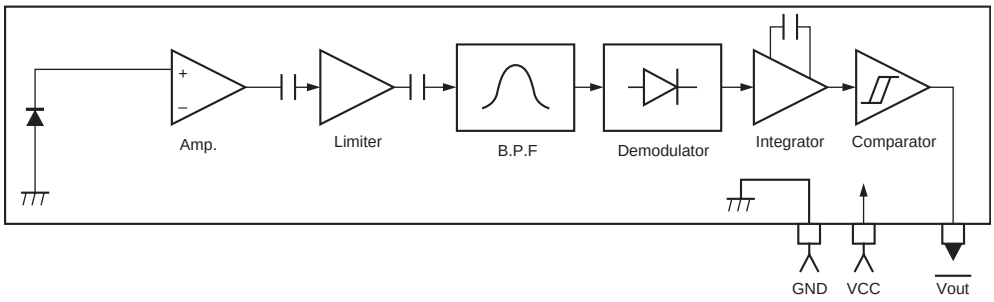
• Pin Layout



• Pin function

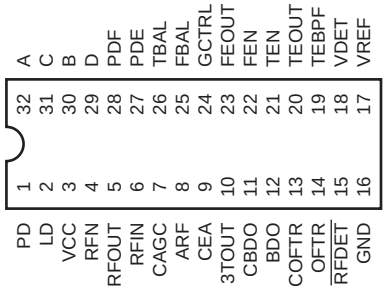
Pin No.	Symbol	Function
1	VCC	3.3V Power Supply
2	I/O0	Data Input/Output
3	I/O1	Data Input/Output
4	WE	Write Enable
5	RAS	Row Address Strobe
6	NC	No conection
8	A10	Address Inputs (2K product)
9	A0	Address Inputs (2K product)
10	A1	Address Inputs (2K product)
11	A2	Address Inputs (2K product)
12	A3	Address Inputs (2K product)
13	VCC	3.3V Power Supply
14	VSS	Ground
15	A4	Address Inputs (2K product)
16	A5	Address Inputs (2K product)
17	A6	Address Inputs (2K product)
18	A7	Address Inputs (2K product)
19	A8	Address Inputs (2K product)
21	A9	Address Inputs (2K product)
22	OE	Output Enable
23	CAS	Column Address Strobe
24	I/O2	Data Input/Output
25	I/O3	Data Input/Output
26	VSS	Ground

6.2 GP1U271XK (IC951) : Receiver for remote

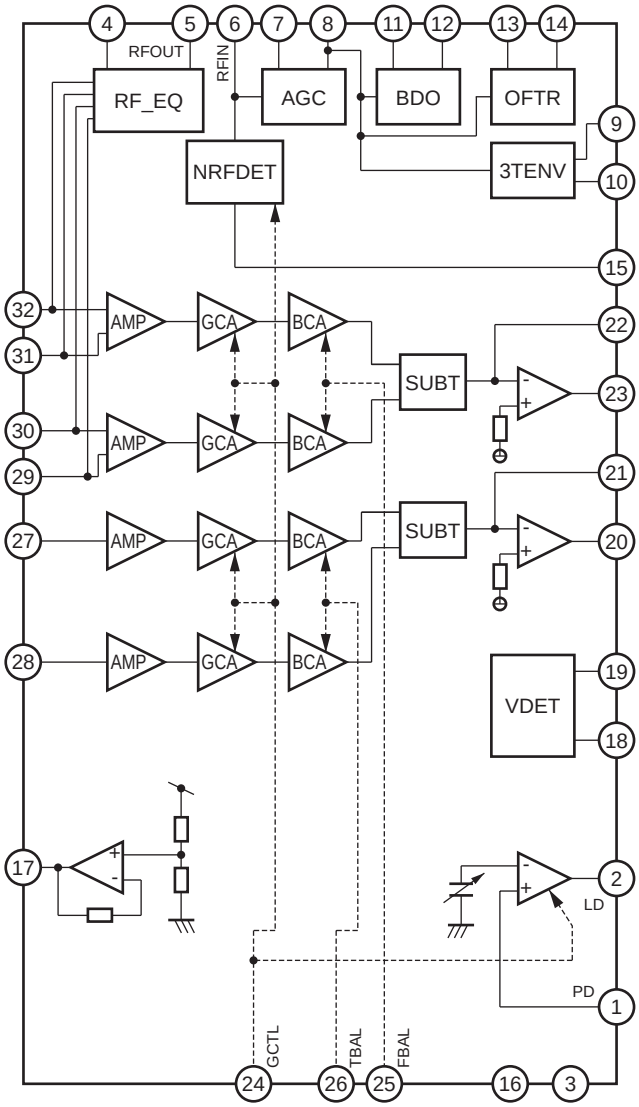


6.3 AN22000A-W (IC601) : RF & SERVO AMP

- Terminal layout


A C B D PDF PDE TBAL FBAL GCTRL FEOUT FEN TEN TEOUT TEBPF VDET VREF
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
PD LD VCC RFN RFOUT RFIN CAGC ARF CEA 3TOUT CBDO BDO COFTR OFTR RFDET GND

- Block diagram

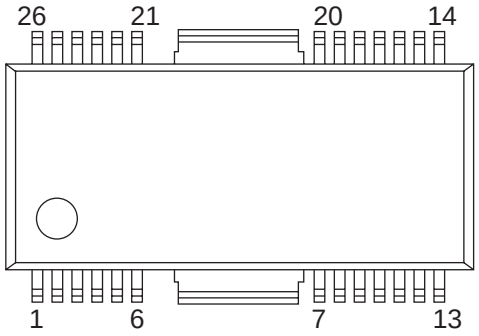


- Pin function

Pin No.	Symbol	I/O	Function
1	PD	I	APC Amp. input terminal
2	LD	O	APC Amp. output terminal
3	VCC	-	Power supply terminal
4	RFN	I	RF adder Amp. inverting input terminal
5	RFOUT	O	RF adder Amp. output terminal
6	RFIN	I	AGC input terminal
7	CAGC	I	Input terminal for AGC loop filter capacitor
8	ARF	O	AGC output terminal
9	CEA	I	Capacitor connecting terminal for HPF-Amp.
10	3TOUT	O	3 TENV output terminal
11	CBDO	I	Capacitor connecting terminal for envelope detection on the darkness side
12	BDO	O	BDO output terminal
13	COFTR	I	Capacitor connecting terminal for envelope detection on the light side
14	OFTR	O	OFTR output terminal
15	NRFDET	O	NRFDET output terminal
16	GND	-	Ground
17	VREF	O	VREF output terminal
18	VDET	O	VDET output terminal
19	TEBPF	I	VDET output terminal
20	TEOUT	O	TE Amp. output terminal
21	TEN	I	TE Amp. inverting input terminal
22	FEN	I	FE Amp. inverting input terminal
23	FEOUT	O	FE Amp. output terminal
24	GCTL	O	GCTL & APC terminal
25	FBAL	O	FBAL control terminal
26	TBAL	O	TBAL control terminal
27	E	I	Tracking signal input terminal 1
28	F	I	Tracking signal input terminal 2
29	D	I	Focus signal input terminal 4
30	B	I	Focus signal input terminal 3
31	C	I	Focus signal input terminal 2
32	A	I	Focus signal input terminal 1

6.4 AN4801SB-W (IC801) : 4 channel power of amp system driver

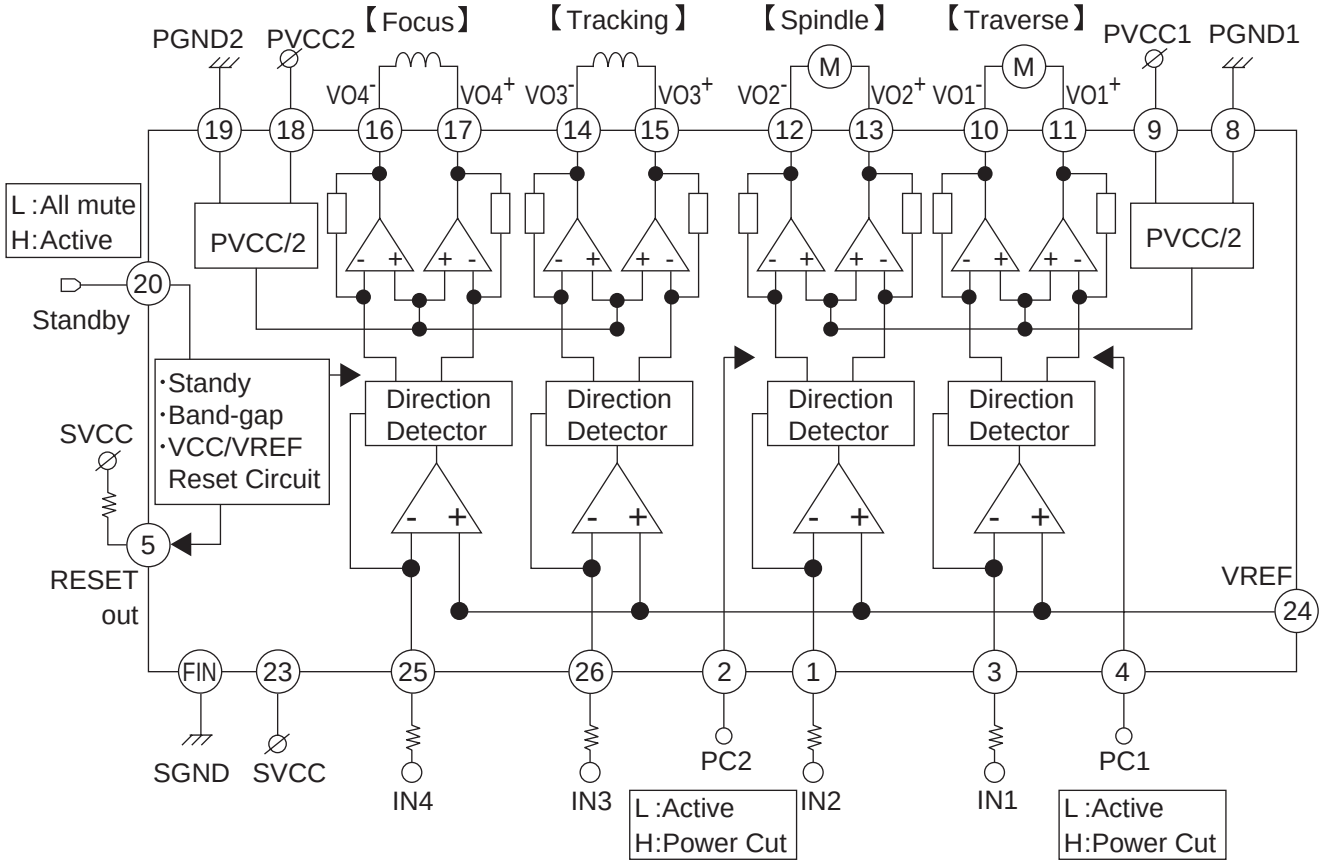
- Pin Layout



- Pin function

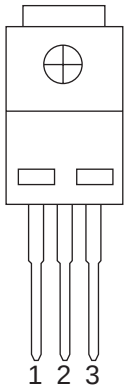
Pin No.	Function	Pin No.	Function
1	Driver 2 input	15	Driver 3 forward output
2	Power Cut input (channel 2 mute)	16	Driver 4 inverted output
3	Driver 1 input	17	Driver 4 forward output
4	Power Cut input (channel 1 mute)	18	Power supply 2 for driver
5	Reset output	19	Ground 2 for driver
6	N. C.	20	Standby input
7	N. C.	21	N. C.
8	Ground 1 for driver	22	N. C.
9	Power supply 1 for driver	23	Power supply
10	Driver 1 inverted output	24	VREF input
11	Driver 1 forward output	25	Driver 4 input
12	Driver 2 inverted output	26	Driver 3 input
13	Driver 2 forward output	fin	Ground
14	Driver 3 inverted output		

- Block Diagram



6.5 BA033T (IC415) : Regurator

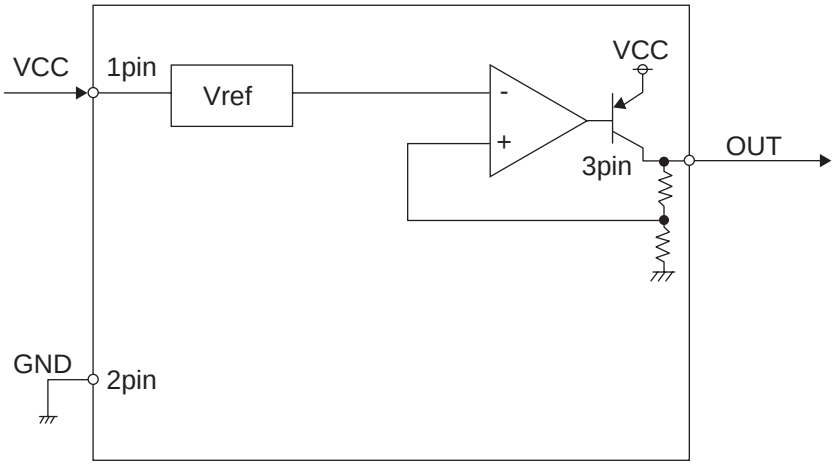
- Pin Layout



- Pin function

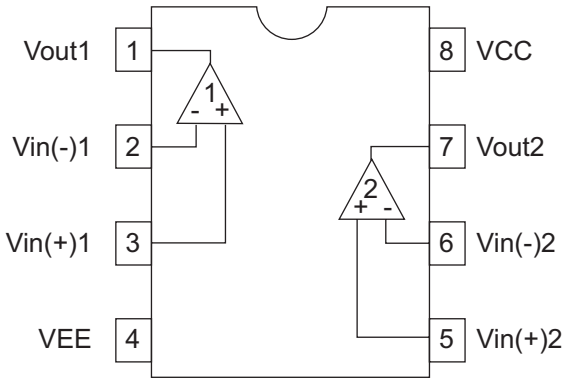
Pin No.	Function
1	VCC
2	GND
3	OUT

- Block Diagram



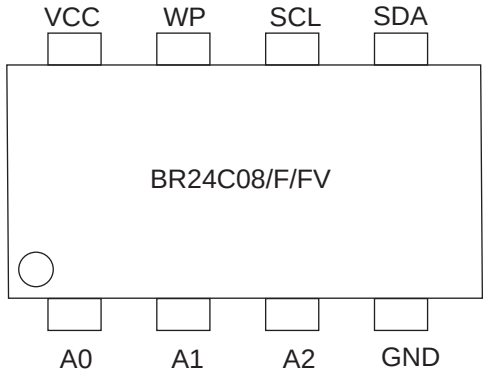
6.6 HA17558A (IC466,IC467,IC491,IC492) : Dual Operational Amp

- Pin layout



6.7 BR24C08FV-X (IC201) : EEPROM

• Pin Layout

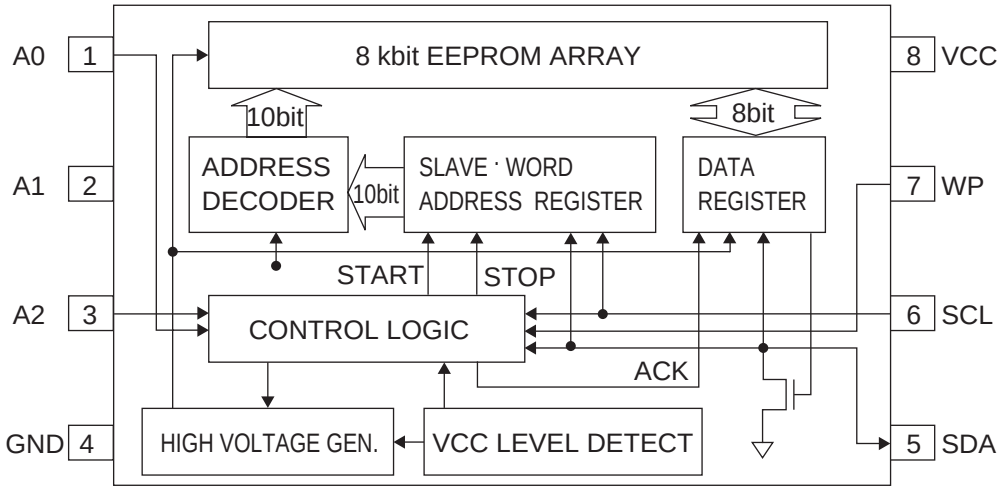


• Pin function

Pin name	I/O	Functions
VCC	-	Power Supply
GND	-	Ground(0V)
A0,A1	-	Out of Use. Please Connect to GND.
A2	I	Slave Address Set
SCL	I	Serial Clock Input
SDA	I/O	Slave and Word Address, Serial Data Input, Serial Data Output *1
WP	I	Write Protect Input

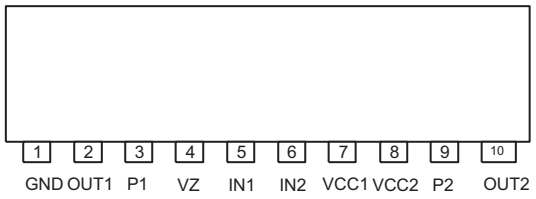
*1 An open drain output requires a pull-up resister.

• Block Diagram



6.8 LB1641 (IC1,IC2) : DC Motor driver

• Pin layout

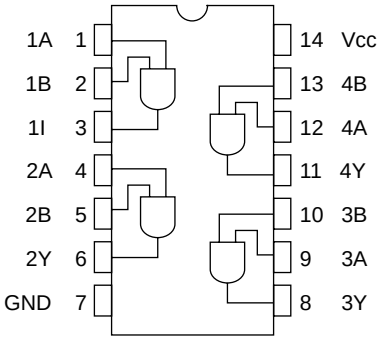


• Truth table

Input		Output		Mode
IN1	IN2	OUT1	OUT2	
0	0	0	0	Brake
1	0	1	0	CLOCKWISE
0	1	0	1	COUNTER-CLOCKWISE
1	1	0	0	Brake

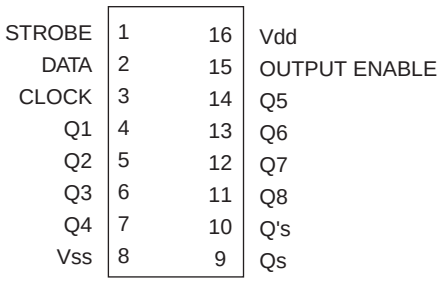
6.9 TC74VHC08FT-X (IC682) : NAND gate

• Pin layout & Block diagram

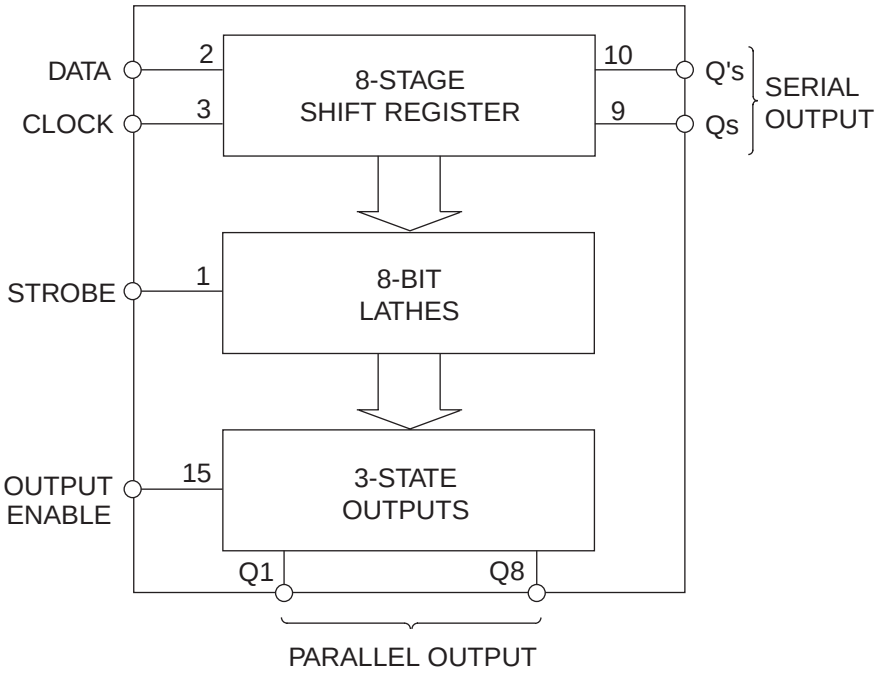


6.10 CD4094BC (IC33) : Serial to parallel port extension

- Pin layout

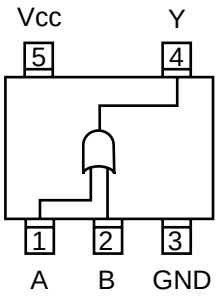


- Block diagram



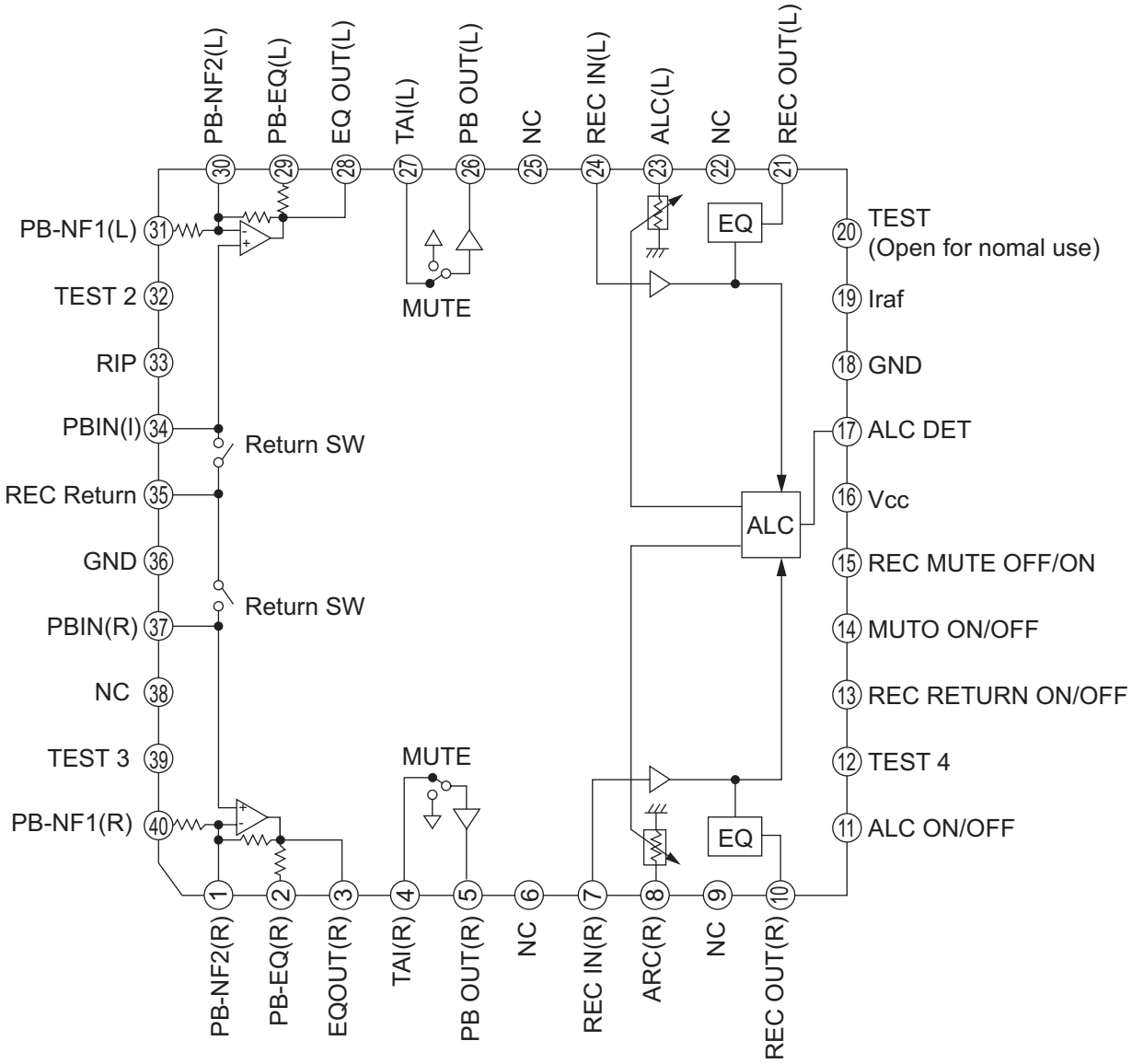
6.11TC7SH32FU-X (IC681) : 2 Input Single OR Gate

- Terminal layout



6.12 HA12238F (IC32) : R/P Equalizer

- Pin layout

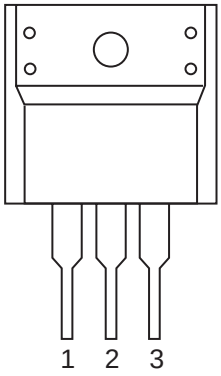


• Pin function

Pin No.	Symbol	Function
1	PB-NF2(R)	PB EQ feed back
2	PB-EQ(R)	NAB output
3	EQOUT(R)	EQ output
4	TAI(R)	Tape input
5	PBOUT(R)	PB output
6	NC	NC pin
7	REC IN(R)	REC-EQ input
8	ALC(R)	ALC(R) signal out put
9	NC	NC pin
10	REC OUT(R)	REC output
11	ALC ON/OFF	Mode control input
12	TEST4	TEST pin
13	REC Return ON/OFF	Mode control input
14	MUTE ON/OFF	Mode control input
15	REC Return ON/OFF	Mode control input
16	Vcc	Vcc Pin
17	ALC DET	ALC detection signal out put
18	GND	GND pin
19	I REF	Equalizer reference current input
20	Test mode	Test modepin
21	REC OUT(L)	REC output
22	NC	NC pin
23	ALC(L)	ALC(L) signal out put
24	REC IN(L)	REC-EQ input
25	NC	NC pin
26	PBOUT(L)	PB output
27	TAI(L)	Tape input
28	EQOUT(L)	EQ output
29	PB-EQ(L)	NAB output
30	PB-NF2(L)	PB EQ feed back
31	PB-NF1(L)	PB EQ feed back
32	TEST2	TEST pin
33	RIP	Ripple fillter
34	PBIN(L)	PB input
35	REC-RETURN	REC Return
36	GND	GND pin
37	PBIN(R)	PB input
38	NC	NC pin
39	TEST3	TEST pin
40	PB-NF1(R)	PB EQ feed back

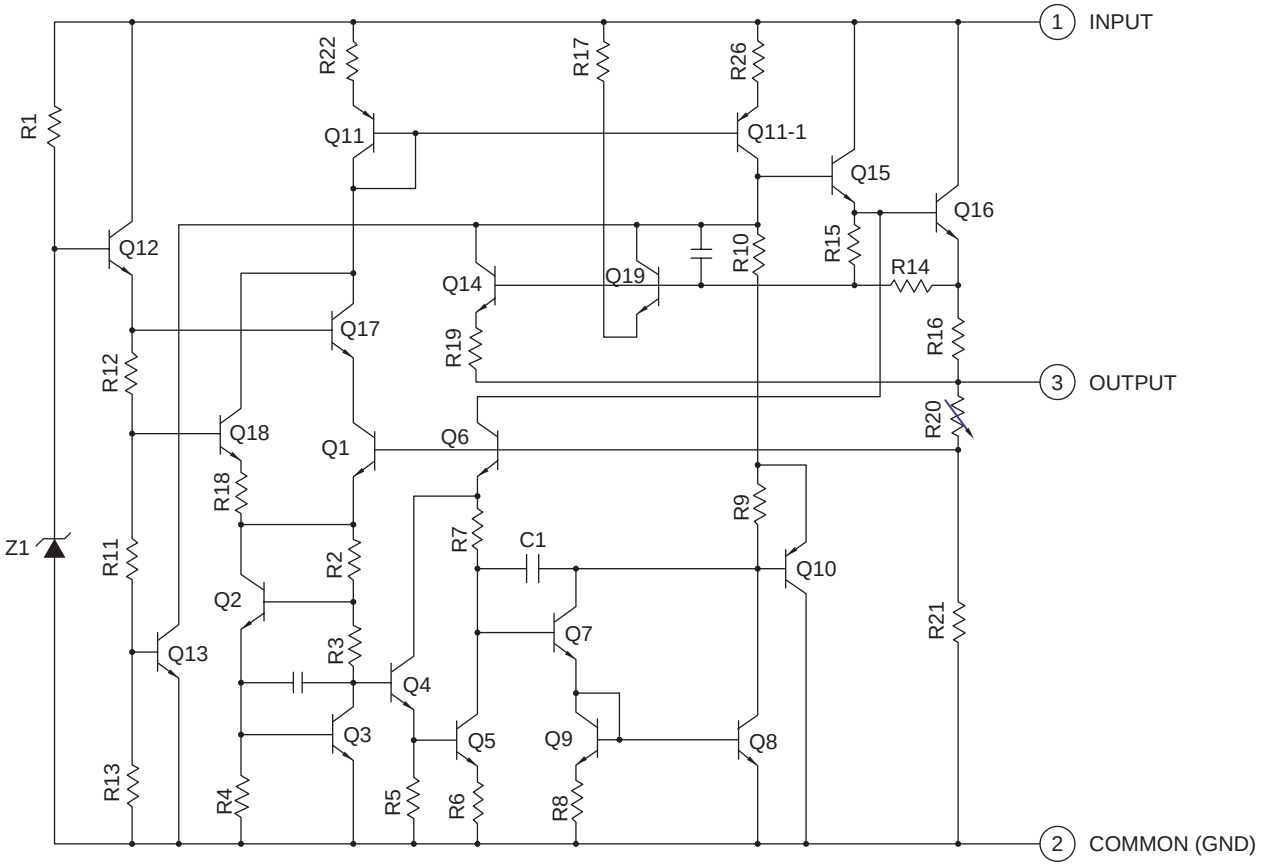
6.13 KIA7805API (IC304,IC360) : Regulator

- Pin layout



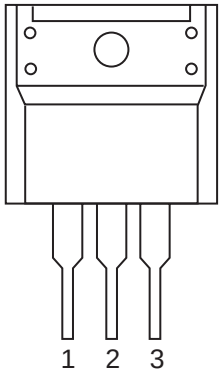
1.VCC
2.GND
3.OUTPUT

- Block diagram



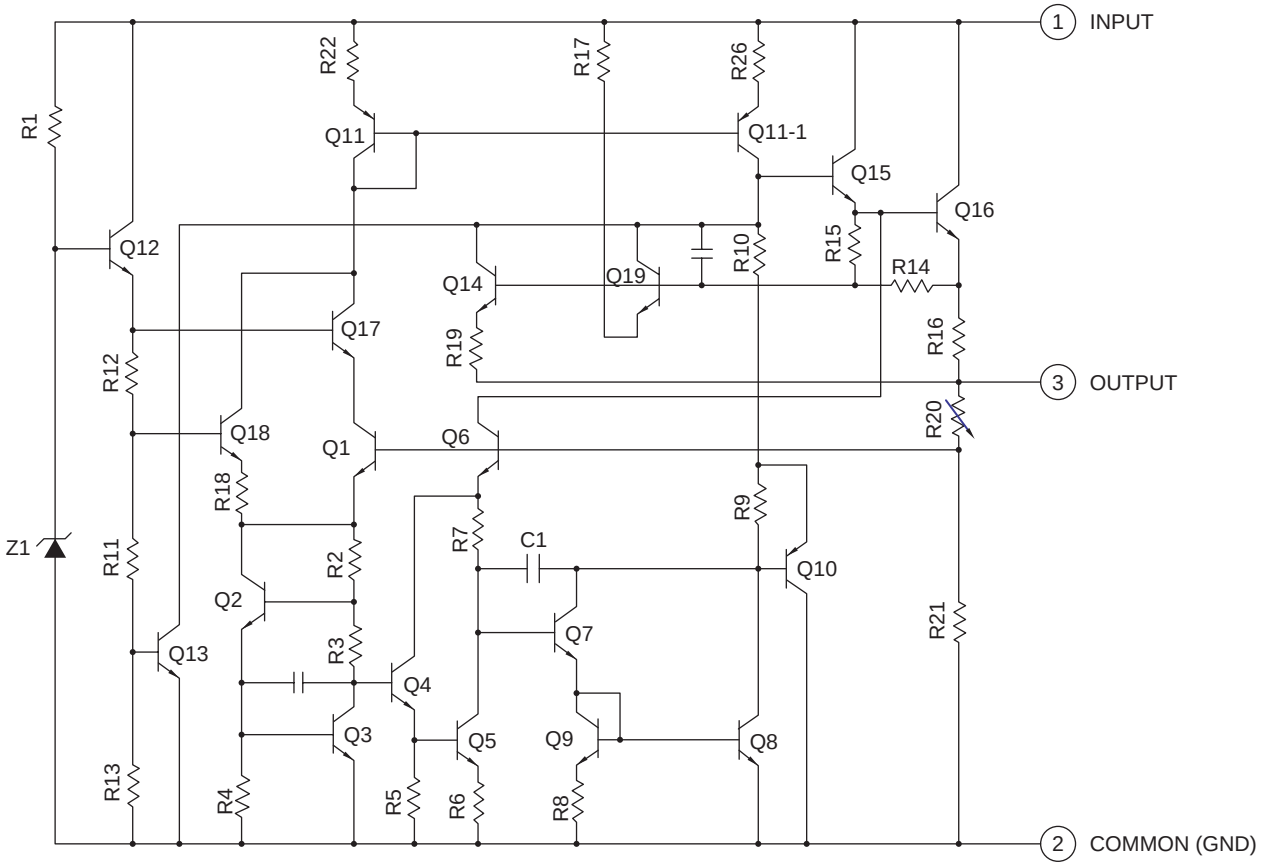
6.14 KIA7808API (IC303) : Regulator

- Pin layout



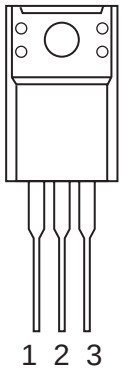
1.VCC
2.GND
3.OUTPUT

- Block diagram



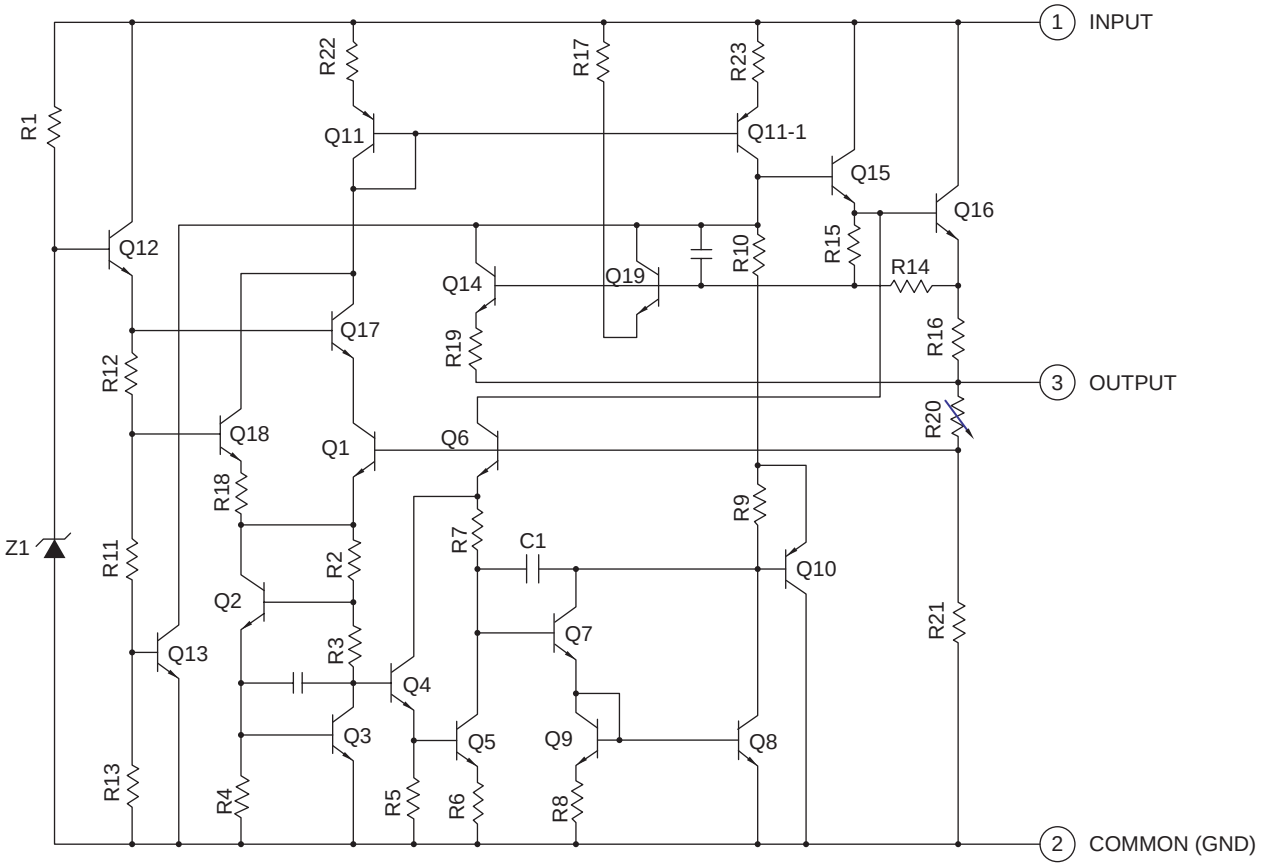
6.15 KIA7809API (IC305) : Regulator

- Pin layout



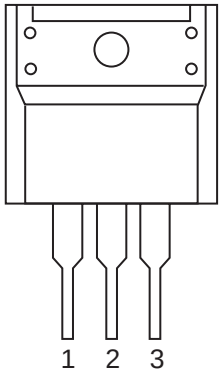
1.INPUT
2.COMMON
3.OUTPUT

- Block diagram



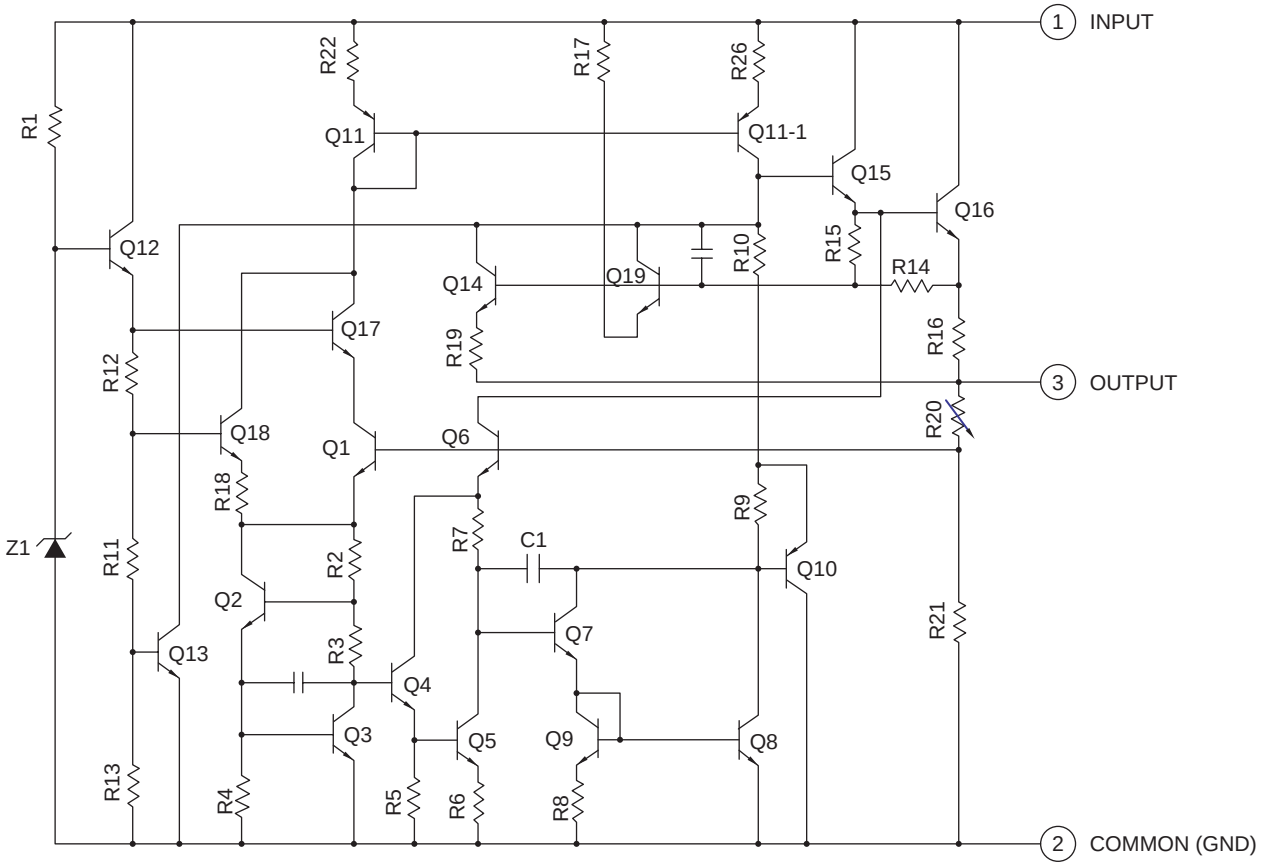
6.16 KIA7812API (IC240) : Regulator

- Pin layout



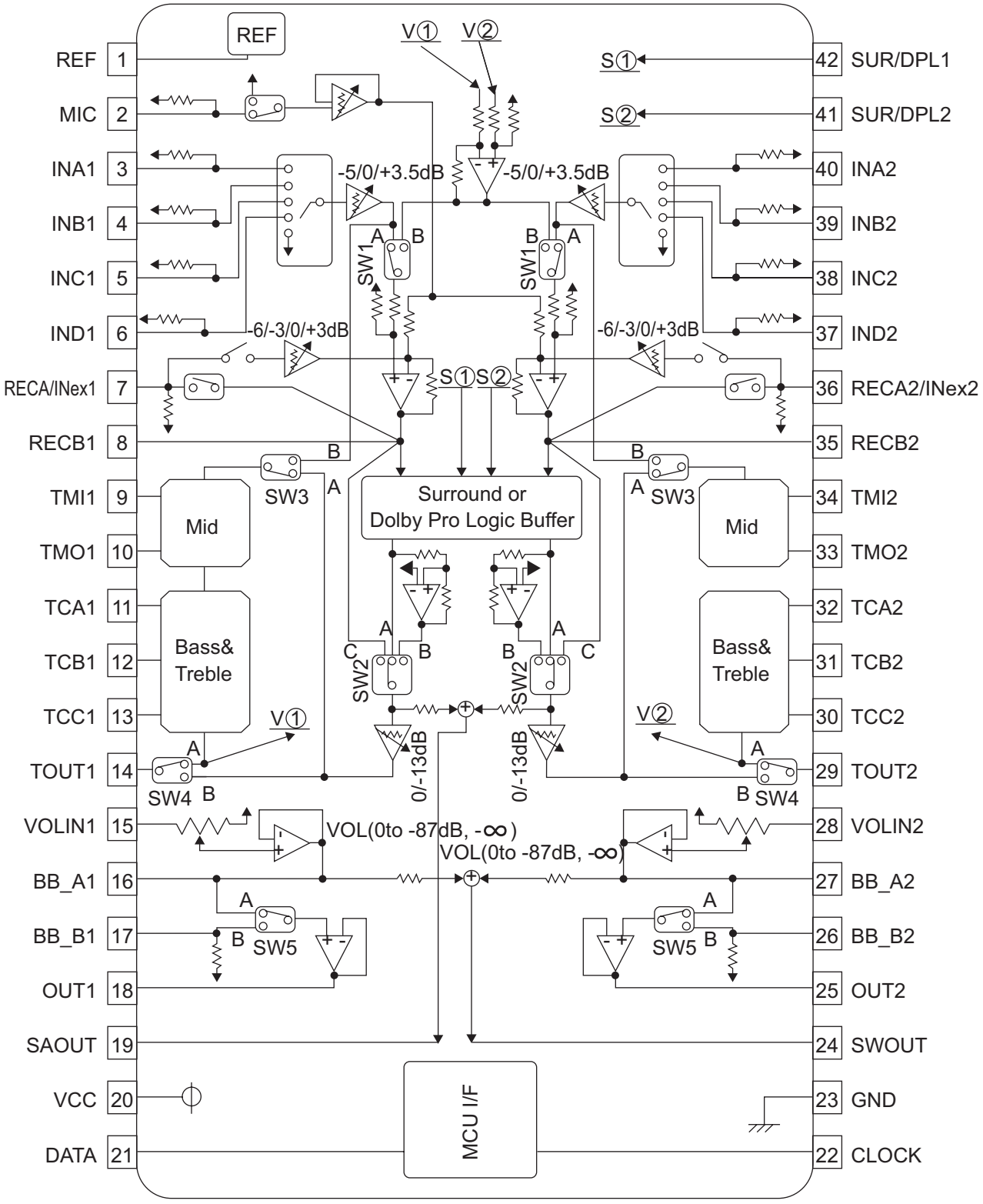
1.VCC
2.GND
3.OUTPUT

- Block diagram



6.17 M61519FP (IC425) : Audio signal proccessor with surround

- Pin layout & Block diagram

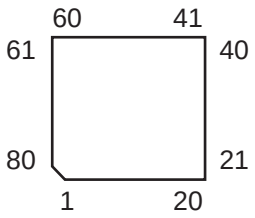


• Pin function

Pin No.	Symbol	Function
1	REF	Input pin of internal reference(REF=4.5V)
2	MIC	Input pin of MIC Mixing
3-6	INA to IND	Input selector
7-8	RECA/INex,RECB	Output pins for REC,RECA can switch mute function and external Input pins (At external input,RECA switchis fixed mute position.)
9-10	TMI,TMO	External pins for Mid(sympathetic vibration type)
11-13	TCA,TCB,TCC	External pins for Bass/Treble(Shelving type)
14	TOUT	Output pins for tone control
15	VOLIN	Input pins of electoronic volume
16-17	BB_A,BB_B	External pins for Bass boost
18	OUT	Output pins
19	SAOUT	Mix pin for spectrum Analyzar(L+R/2)
20	VCC	Internal analog,power pin for digital circuit
21-22	DATA,CLOCK	DATA for serial data, CLOCK input pin
23	GND	Internal analog,GND pin for digital circuit
24	SWOUT	Mix pin for super woofer
25	OUT	Output pins
26-27	BB_A,BB_B	External pins for Bass boost
28	VOLIN	Input pins of electoronic volume
29	TOUT	Output pins for tone control
30-32	TCA,TCB,TCC	External pins for Bass/Treble(Shelving type)
33-34	TMI,TMO	External pins for Mid(sympathetic vibration type)
35-36	RECA/INex,RECB	Output pins for REC,RECA can switch mute function and external Input pins (At external input,RECA switchis fixed mute position.)
37-40	INA to IND	Inuput selector
41-42	SUR/DPL	External pins for surround, switching mute function use with DPL Input pin

6.18 MN101C61GMB1 (IC251) : Driver

- Pin Layout



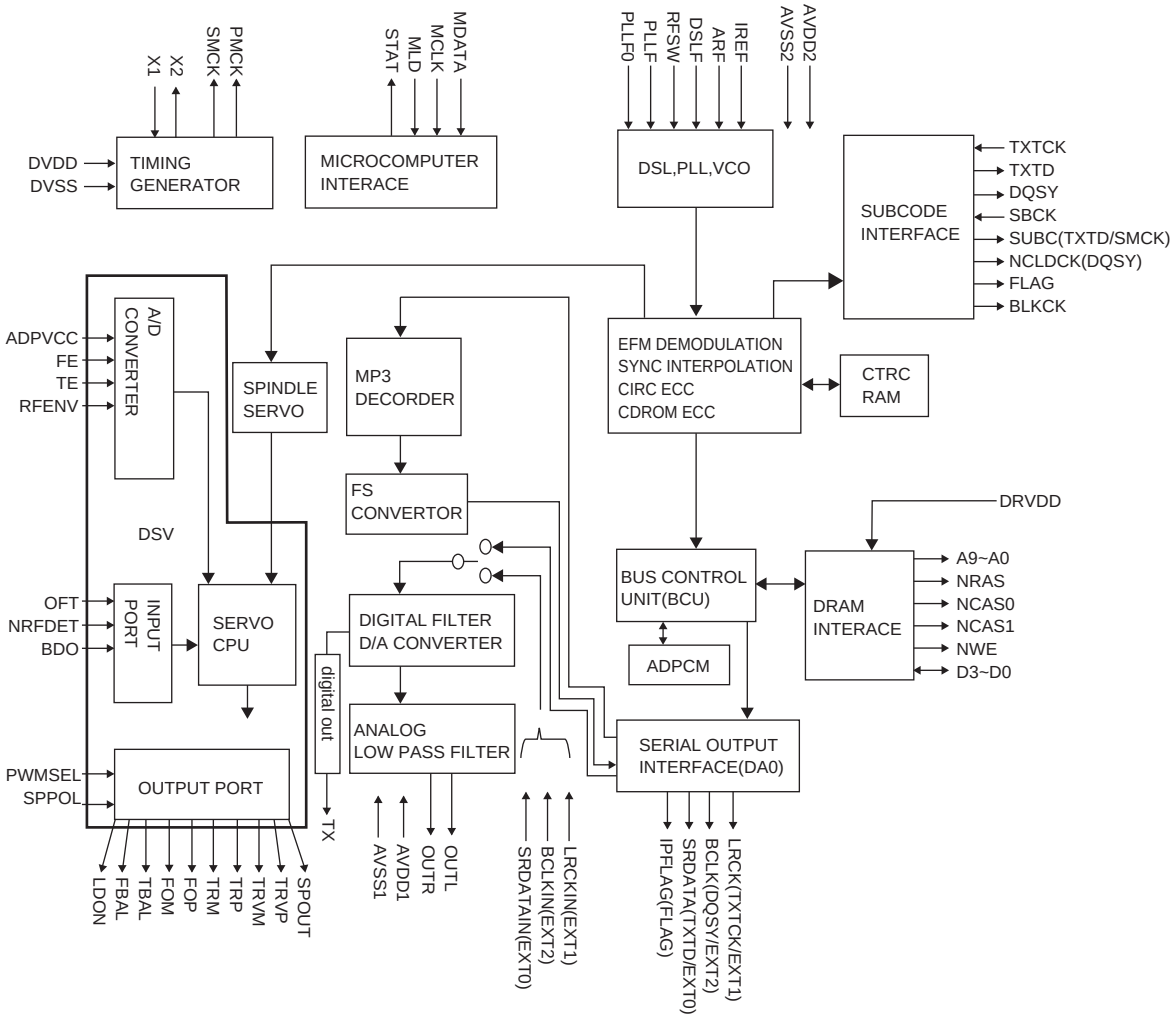
- Pin function

PinNo.	Symbol	I/O	Function
1	VREF-	I	GND
2	ANO:3.3VMON	I	3.3v monitor
3	AN1:L.SENSOR	I	Linier sensor
4	AN2:1.8VMON	I	1.8v monitor
5~7	NC	I	No use
8	NC	-	No use
9	NC(VPP)	-	No use
10	VREF+	-	Reference Voltage
11	VDD	-	Reference Voltage
12	OSC2	O	Main oscillator
13	OSC1	I	Main oscillator
14	VSS	-	GND
15	XI	I	GND
16	XO	O	No use
17	MMOD	I	GND
18	MDATA;SB01	O	command data
19	STAT:SBI1	I	status
20	MCLK SBT1	O	somannd data
21	SB02;SIO	I/O	serial I/O
22	BUSY	I/O	busy
23	SBT2:SCLK	I/O	serial colock
24	P06/MLD	O	command data
25	/RESET	I	reset
26	TRAY_CLOSE	O	main tray close
27	TRAY_OPEN	O	main tray open
28	POSITION_UP	O	position main up
29	POSITION_DOWN	O	position main down
30	P14;/P.ON	O	power
31	IRQ0;BLKCK	I	subQ clock for block
32	IRQ1;DQSY	I	CD-TEXT pack for data
33	IRQ2;FLAG/MON2	I	FLAG/MON2(/TXNCLDCK)
34	IRQ3;MON	I	MON(/NCAS1/A11)

PinNo.	Symbol	I/O	Function
35	P30;/AST_DSP	O	reset
36	CDEMP	O	CD emphasis
37	P31;TXTD	I	CD-TEXT data
38	P32;TXTCK	O	CD-TEXT clock
39	CDCOPY	O	CD copy
40	CDTNO	O	CD TNo
41	CDINDEX	O	CD index
42~43	NC	I/O	No use
44	TXDO	O	status out
45	RXDO	I	command in
46~59	NC	I/O	No use
60	E2PSCL	O	clock
61	E2PSDA	I/O	data I/O
62	PC1	O	driver mute ch1
63	PC2	O	driver mute ch2
64	/DR_MUTE	O	driver mute
65	EQX5	O	eqsw x5
66	EQX2	O	eqsw x2
67	EQX4	O	eqsw x4
68	/RESET_SW(PUP)	I	rest switch
69	NC	I/O	No use
70	STEND(PUP)	I	sub tray end switch
71	MTOPEN(PUP)	I	main tray open switch
72	CLOSE5(PUP)	I	tray5 close sw
73	CLOSE4(PUP)	I	tray4 close sw
74	CLOSE3(PUP)	I	tray3 close sw
75	CLOSE2(PUP)	I	tray2 close sw
76	CLOSE1(PUP)	I	tray1 close sw
77	STSAT(PUP)	I	sub tray start switch
78	RAS_CONT	O	ras control
79	CAS_CONT	O	cas control
80	WE_CONT	O	we control

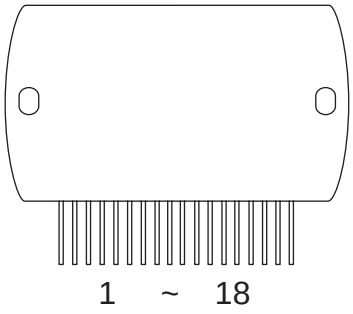
6.19 MN6627911AC1 (IC651) : Micon

- Block diagram

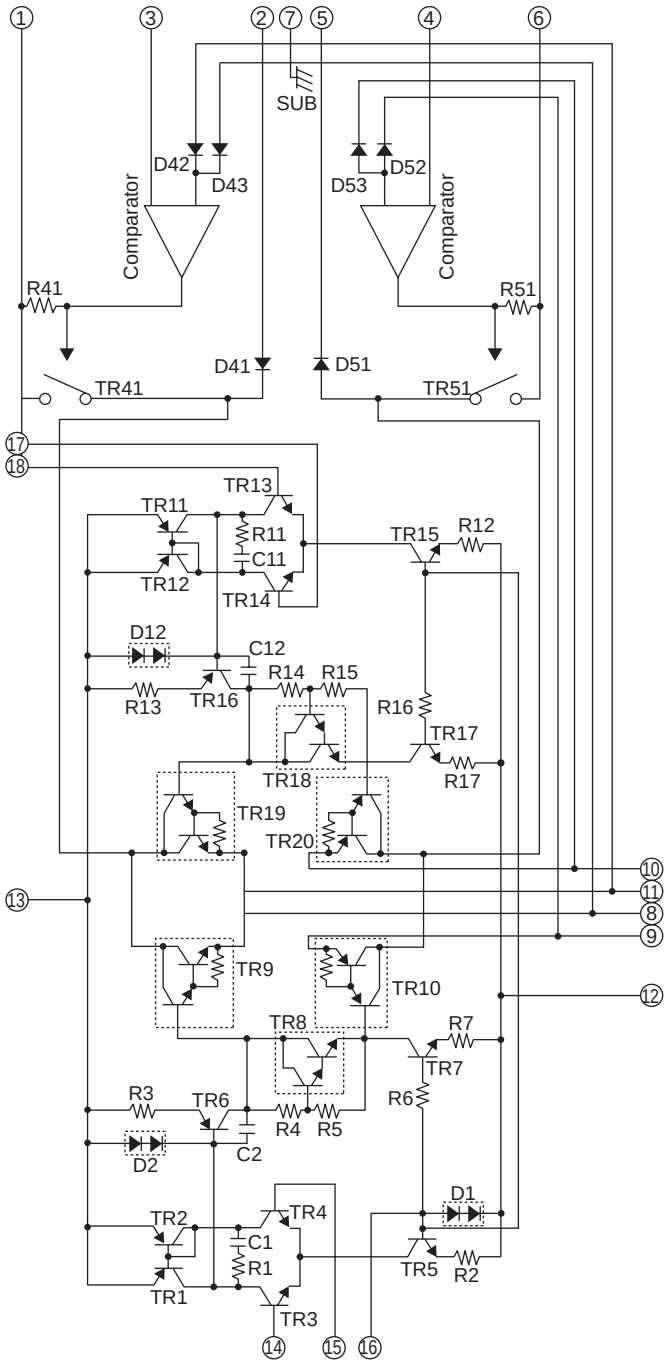


6.20 STK412-420 (IC701) : Power amplifier

- Pin Layout

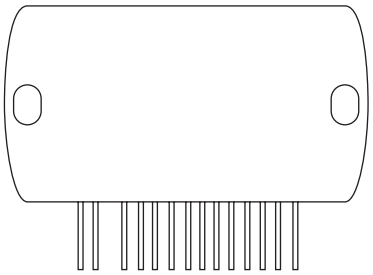


- Block Diagram

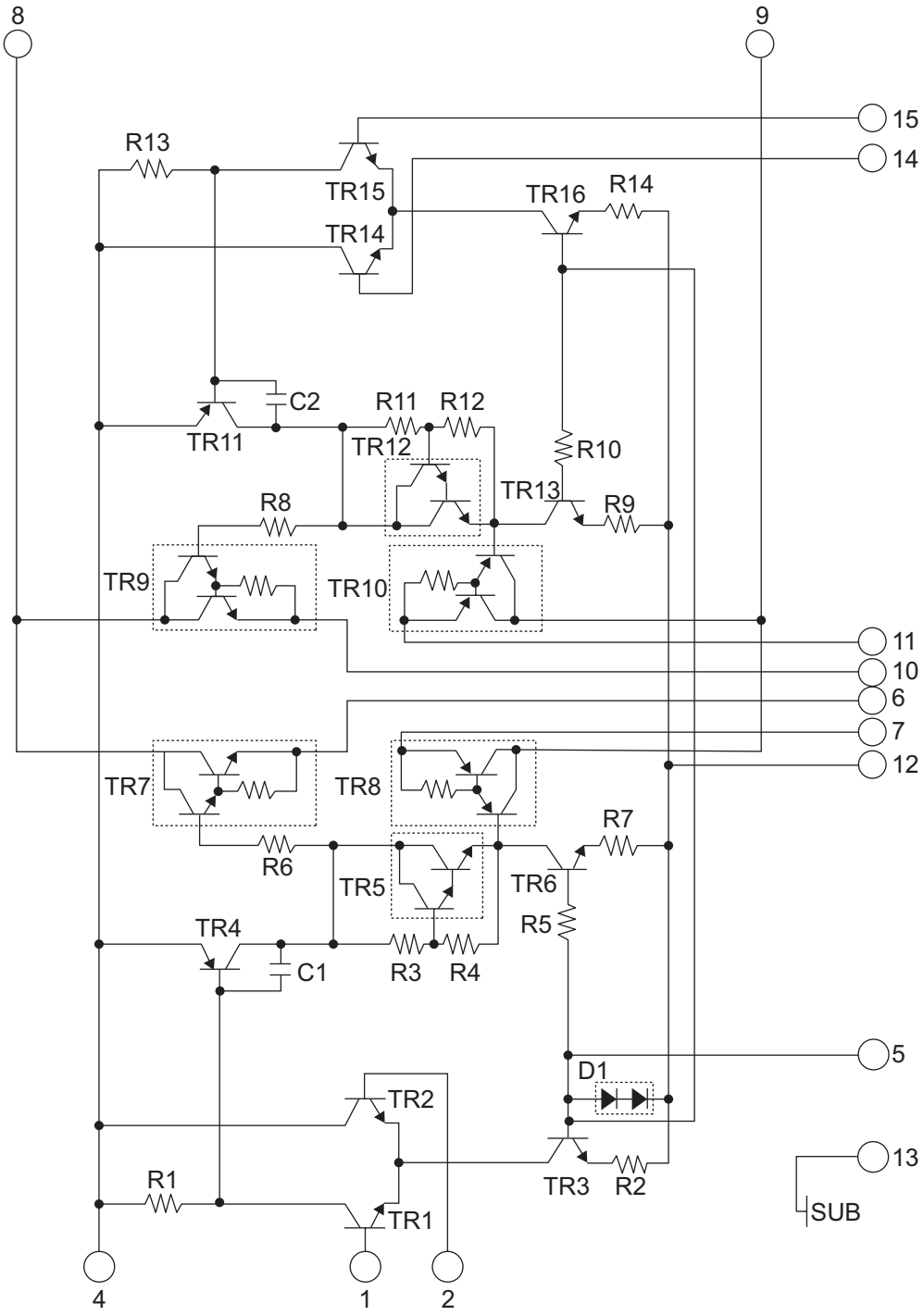


6.21STK432-070 (IC602) : 2ch AF power amp

- Pin Layout

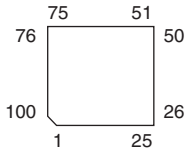


- Block Diagram



6.22 UPD784215AGF535 (IC810) : Micon

- Pin Layout



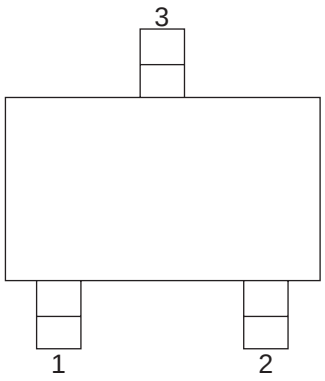
- Pin function

PinNo.	Symbol	I/O	Function
1	DLED1	-	Disc 1 LED
2	STBLED	I	Sound Turbo LED
3	SWRLED	I	Subwoofer LED
4	DLED2	I	Disc 2 LED
5	SMDLED	I	Sound Mode LED
6	RECLED	I	Recording LED
7	DLED3	I	Disc 3 LED
8	DCLLED	I	Dance Club LED
9	+B5.0V	I	Back-up +5.0V
10	RCKLED	-	Rock LED
11	DLED4	-	Disc 4 LED
12	HALLED	O	Hall LED
13	POPLED	I	Pop LED
14	DLED5	-	Disc 5 LED
15	BUZZER	I	Buzzer Output
16	DVLED1	O	No Connection
17	STDLED	I	Stadium LED
18	CLSLED	O	Classic LED
19	DVLED2	I	No Connection
20	BLED5	I	No Connection
21	BLED6	O	No Connection
22	VPP	O	Flash Connector
23	BLED1	O	FL Back-light LED 1
24	BLED2	O	FL Back-light LED 2
25	BLED3	O	FL Back-light LED 3
26	BLED4	I	FL Back-light LED 4
27	SBYLED	I	Stand-by LED (direct)
28	VOLLED	I	Volume LED (direct)
29	SMUTE	I	System Mute
30	HPMUTE	I	Headphone mute
31	PBMUTE	I	Playback mute
32	RELAY	-	Relay Control
33	POUT	I	Power On
34	BASS1	I	Subwoofer Level 1
35	BASS2	-	Subwoofer Level 2
36	NC	-	No Connection
37	+B5.0V	-	Back-up +5.0V
38	OSC	O	12MHz Crystal OSC
39	OSC	O	12MHz Crystal OSC
40	GND	O	GND
41	NC	-	No Connection
42	GND	O	GND
43	RESET	O	Micom Reset (Pull-up to +B5.0V)
44	INH	O	Back-up Mode Detect
45	HPSW	O	Headphone Detect switch
46	REMIN	I	Remocon Input

PinNo.	Symbol	I/O	Function
47	PRT	I	Protector Input
48	RDS CK	I	RDS Clock
49	MSI	I	Music Scan Input
50	PUP	I	Pull Up
51	+5.0V		+5.0V
52	+5.0V		+5.0V
53	KEY1	I	KEY1 Input
54	KEY2	I	KEY2 Input
55	KEY3	I	KEY3 Input
56	KEY4	I	KEY4 Input
57	SLCPLAY	I	SLC Detect Play
58	SLCKEY	I	SLC Key Input
59	PHOTO A	I	SLC Photo A
60	SPI	I	SPI Analog Input
61	GND		GND
62	RDS DATA	I	RDS Data Input
63	TUCE	O	Tuner Chip Enable
64	GND		GND
65	MSTAT	I	FMU-SC6 Status Input
66	KCMND	O	FMU-SC6 KCMND (serial data)
67	VC3RESET	O	FMU-SC6 Reset
68	DATA IN	I	Tuner Data Input
69	DATA OUT	O	SLC / Tuner Data Output
70	CK	O	SLC / Tuner Clock
71	SLCCE	O	SLC Chip Enable
72	FLSTB	O	FL Latch
73	GND	I	GND
74	FLDATA	O	FL Data Output
75	FLCLK	O	FL Clock
76	FLBLK	O	FL Blanking
77	NC	O	No Connection
78	VOLCLK	O	Volume IC CLK Output
79	VOLDATA	O	Volume IC DATA Output
80	ECHO1	O	Echo Data 1
81	ECHO2	O	Echo Data 2
82	NC	O	NC
83	ECON	O	Ecology Mode
84	VOL-	I	Volume Jog Input +
85	VOL+	I	Volume Jog Input -
86	SM-	I	S.Mode Jog Input +
87	SM+	I	S.Mode Jog Input -
88	RSEARCH	I	Search Jog Input -
89	FSEARCH	I	Search Jog Input +
90,91	NC	-	No Connection
92-99	RSVD1~8	-	GND
100	GND	-	

6.23 XC6206P182M-X (IC691) : Regulator

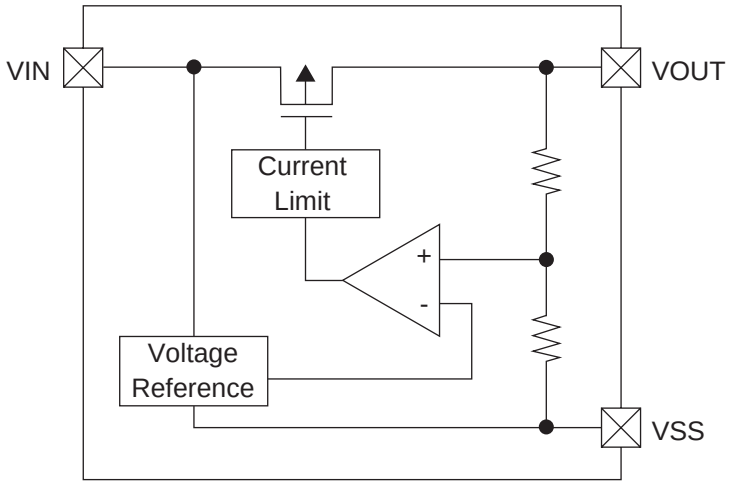
- Pin Layout



- Pin funciton

PIN No.	Symbol	Function
1	VSS	Ground
2	VOUT	Output
3	VIN	Power Input

Block Diagram



JVC
VICTOR COMPANY OF JAPAN, LIMITED
AV & MULTIMEDIA COMPANY AUDIO/VIDEO SYSTEMS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.22067)

Printed in Japan
WPC

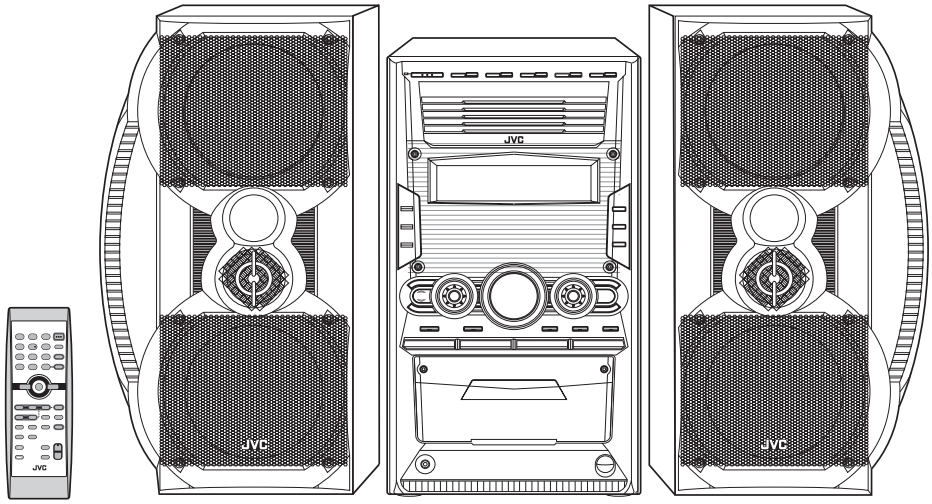
JVC

SCHEMATIC DIAGRAMS

COMPACT COMPONENT SYSTEM

HX-Z30

CD-ROM No.SML200306



SP-HXZ30 **CA-HXZ30** **SP-HXZ30**

COMPACT disc DIGITAL AUDIO

Area Suffix	
J	U.S.A.
C	Canada

Contents

Block diagram ---------- 2-2
Standard schematic diagrams ---------- 2-4
Printed circuit boards ---------- 2-16 to 23

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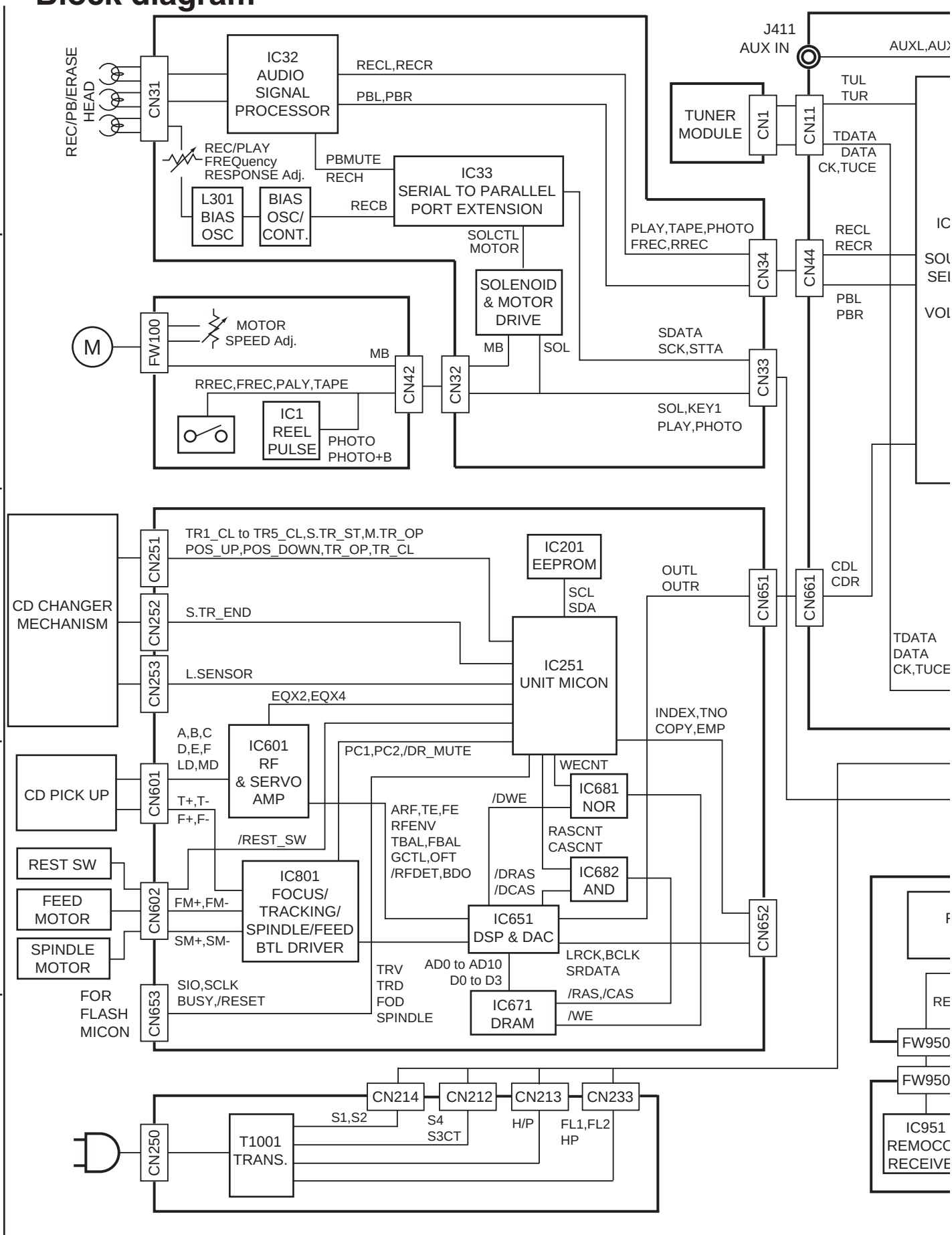
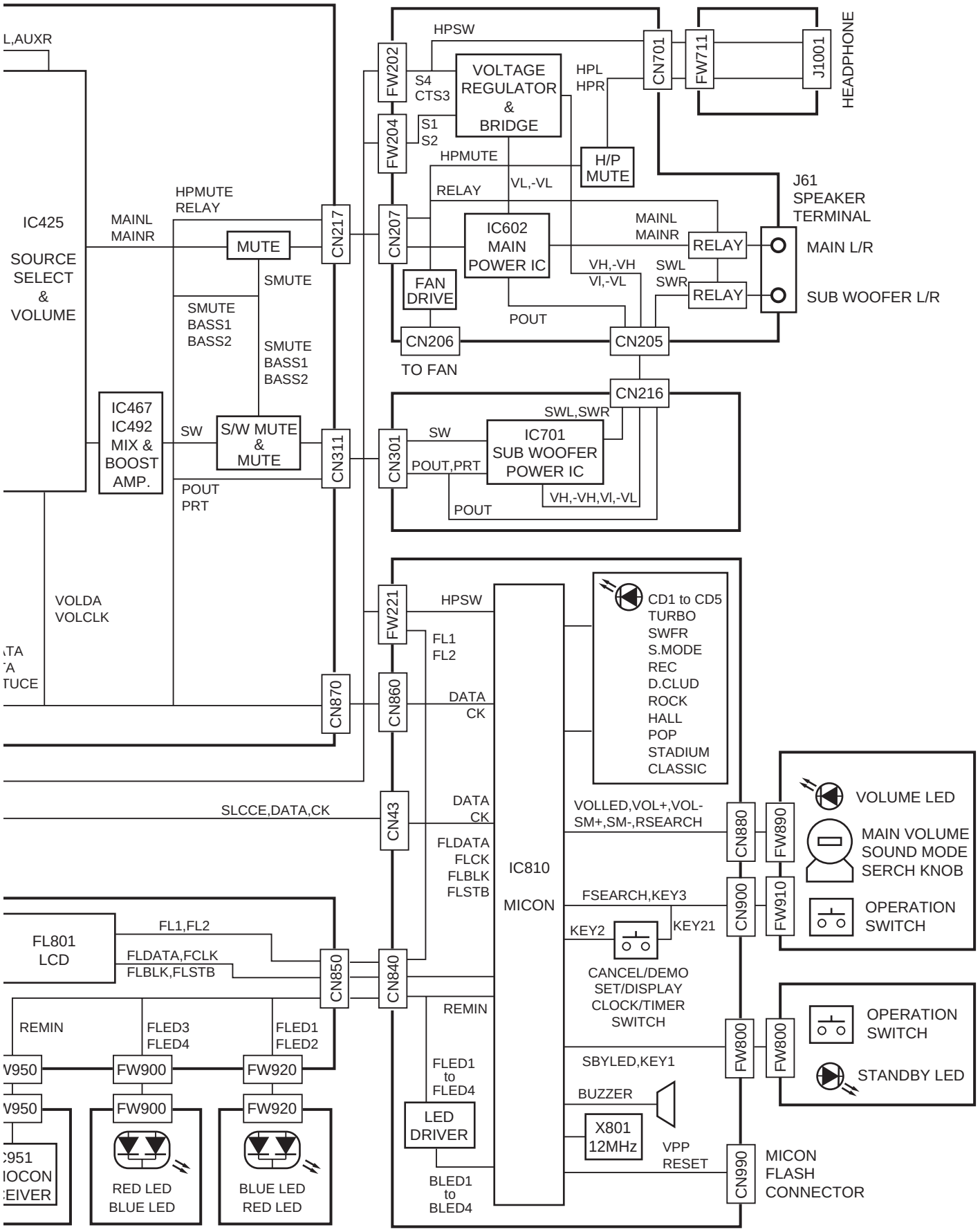
No.22067SCH
2003/6

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor ( ), diode ( ) and ICP ( ) or identified by the "⚠" mark nearby are critical for safety.

< MEMO >

Block diagram

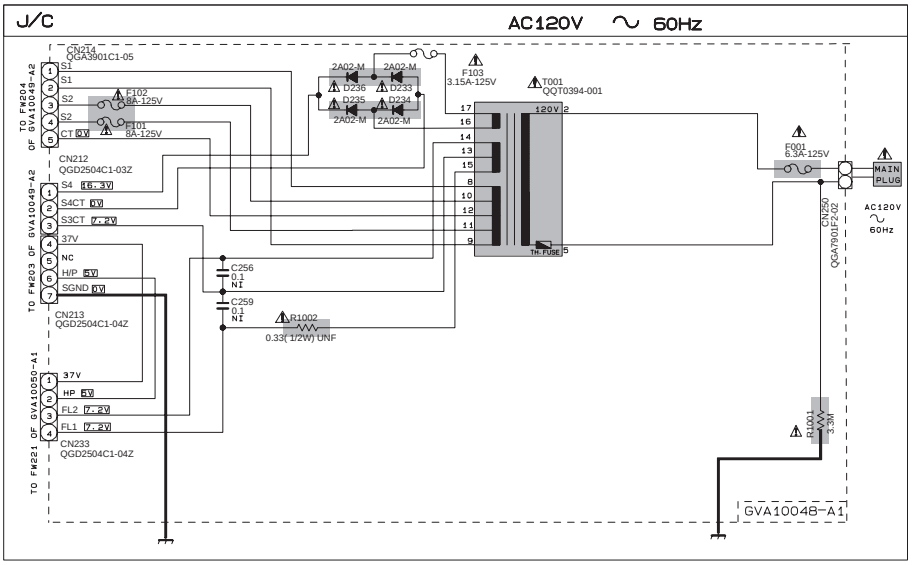



L,AUXR
IC425
SOURCE SELECT & VOLUME
MAINL MAINR
HPMUTE RELAY
MUTE
SMUTE
SMUTE BASS1 BASS2
SMUTE BASS1 BASS2
IC467 IC492 MIX & BOOST AMP.
SW
S/W MUTE & MUTE
POUT PRT
VOLDA VOLCLK
SLCCE,DATA,CK
CN217
CN311
CN870
CN43
CN850
HPSW
VOLTAGE REGULATOR & BRIDGE
S4 CTS3
S1 S2
HPMUTE
RELAY
VL,-VL
H/P MUTE
HPL HPR
FW202
FW204
FW207
IC602 MAIN POWER IC
FAN DRIVE
VH,-VH Vl,-VL
SWL SWR
POUT
CN206
TO FAN
CN205
CN701
FW711
J1001
HEADPHONE
J61 SPEAKER TERMINAL
MAINL MAINR
RELAY
MAIN L/R
RELAY
SUB WOOFER L/R
CN216
SWL,SWR
FW301
SW
IC701 SUB WOOFER POWER IC
POUT,PRT
VH,-VH,Vl,-VL
POUT
FW221
HPSW
FL1 FL2
CN860
DATA CK
DATA CK
FLDATA FLCK FLBLK FLSTB
REMIN
FLED1 to FLED4
LED DRIVER
BLED1 to BLED4
IC810 MICON
CD1 to CD5
TURBO
SWFR
S.MODE
REC
D.CLUD
ROCK
HALL
POP
STADIUM
CLASSIC
VOLLED,VOL+,VOL-
SM+,SM-,RSEARCH
FSEARCH,KEY3
KEY2
KEY21
CANCEL/DEMO
SET/DISPLAY
CLOCK/TIMER
SWITCH
SBYLED,KEY1
BUZZER
X801 12MHz
VPP
RESET
CN880
CN900
CN800
CN990
FW890
FW910
FW800
FW800
VOLUME LED
MAIN VOLUME
SOUND MODE
SERCH KNOB
OPERATION SWITCH
OPERATION SWITCH
STANDBY LED
MICON FLASH CONNECTOR
FL801 LCD
FL1,FL2
FLDATA,FCLK
FLBLK,FLSTB
REMIN
FLED3 FLED4
FLED1 FLED2
FW900
FW920
FW900
FW920
RED LED
BLUE LED
BLUE LED
RED LED

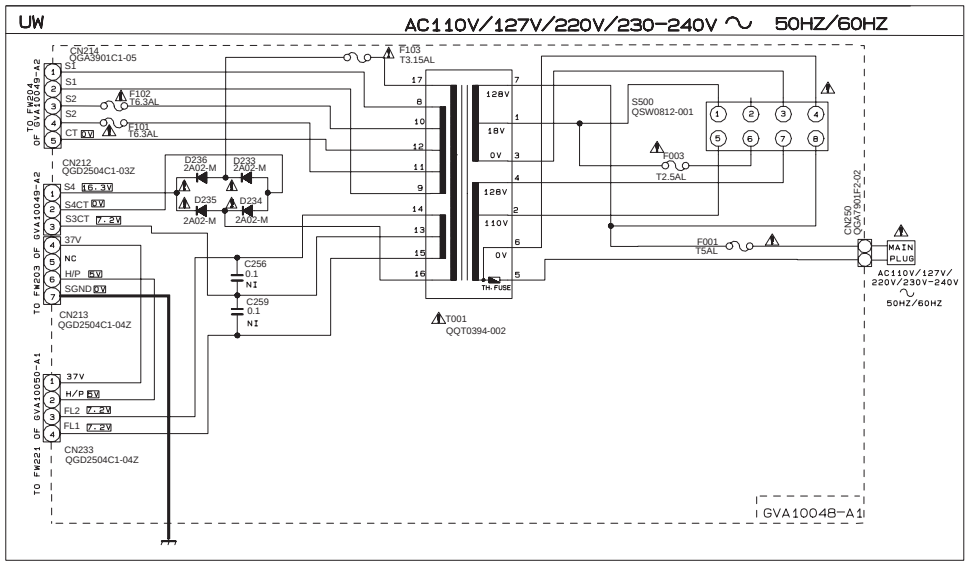
Standard schematic diagrams

■ Power supply section

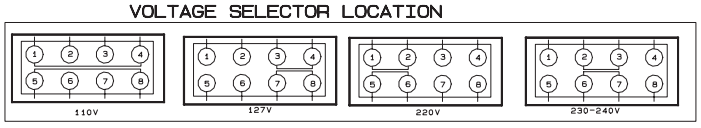
POWER SUPPLY BLOCK



POWER SUPPLY BLOCK



VOLTAGE SELECTOR LOCATION



EXPLANATION OF OVERALL OF SCHEMA.

MODEL HX-Z30

SHEET NUMBER	CIRCUITS DESCRIPTION
1/6	.PRIMARY WITH MAINS TRANSFORMER
2/6	.DC REGULATORS/AUDIO OUTPUT
3/6	.EXTERNAL INPUT. SOURCE SELECTOR SWITCH
4/6	.FL DISPLAY. SYSTEM CONTROL LSI. USER CONTROL KEYS
5/6	.CD SERVO AND CD SYSTEM CONTROL .CD CHANGER MECHANISM CONTROL
6/6	.TAPE DECK MECHANISM CONTROL .TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

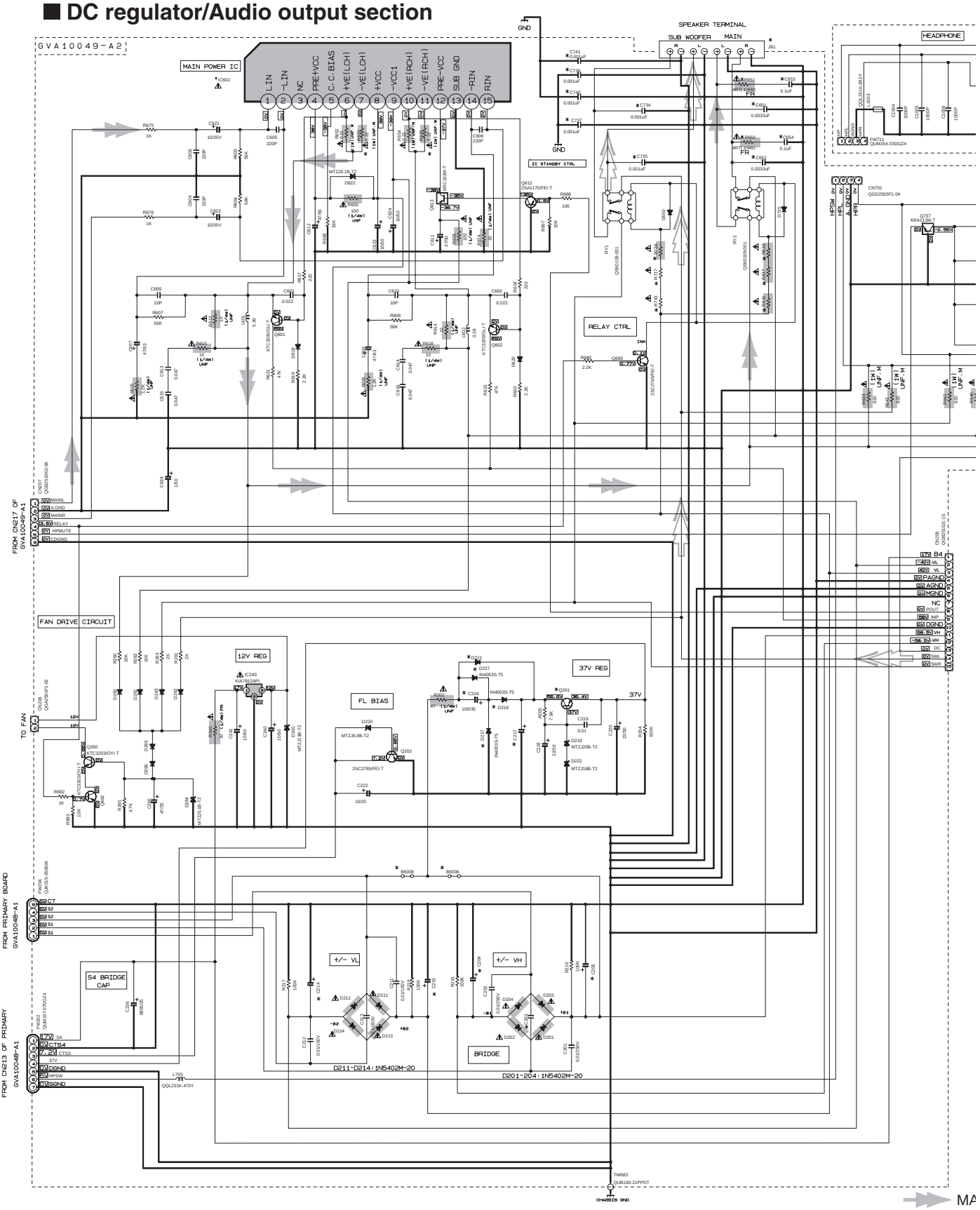
VERSION CODES

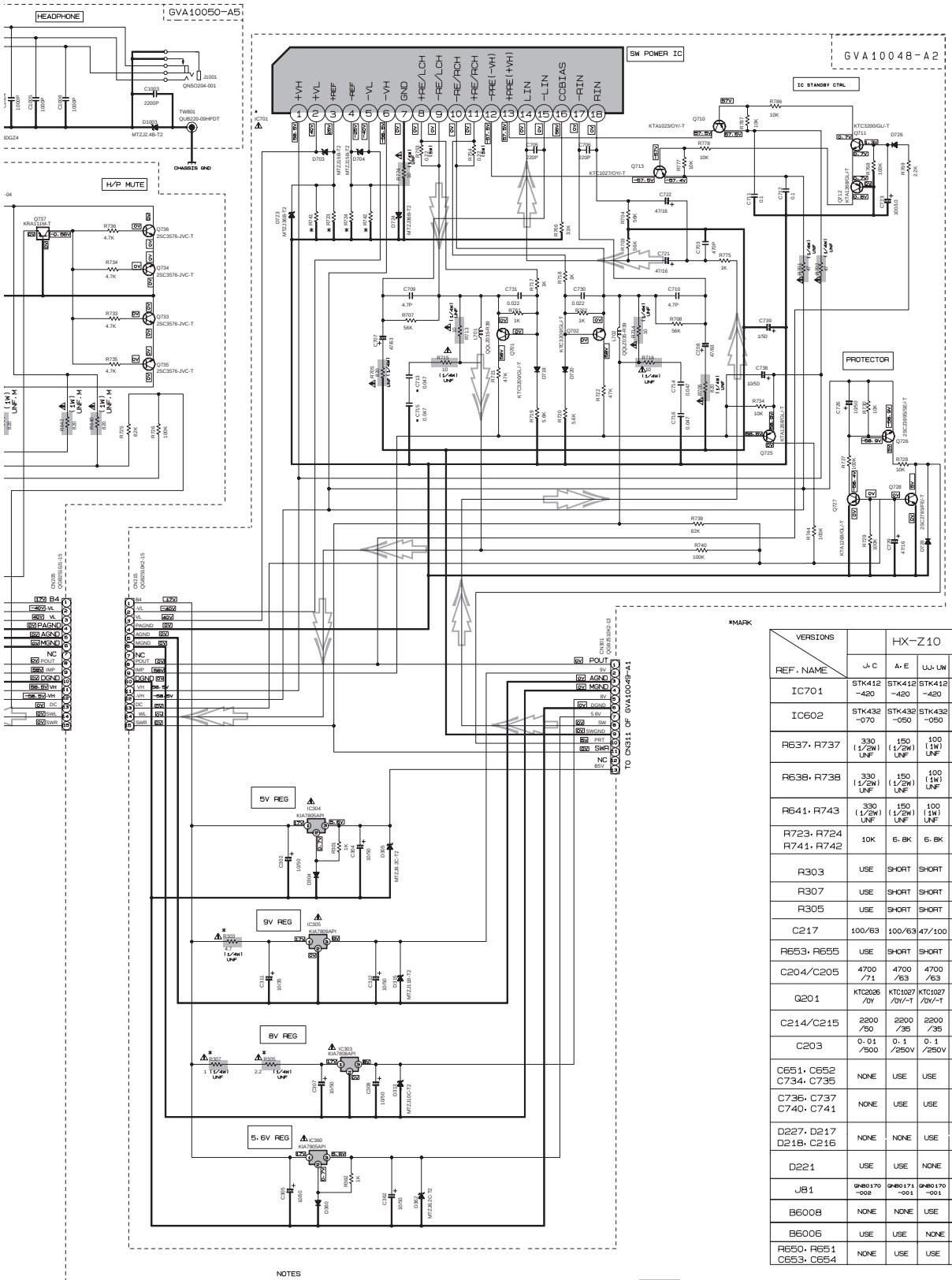
J :U.S.A.
C :CANADA
UW :SOUTH AMERICA EXCEPT ARGENTINA

NOTE

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION --- AUX MODE. VOL MIN. BASS OFF
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/4W ± 5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS119-041-T2
3. NI-COMPONENT NOT INSERT

■ DC regulator/Audio output section





*MARK

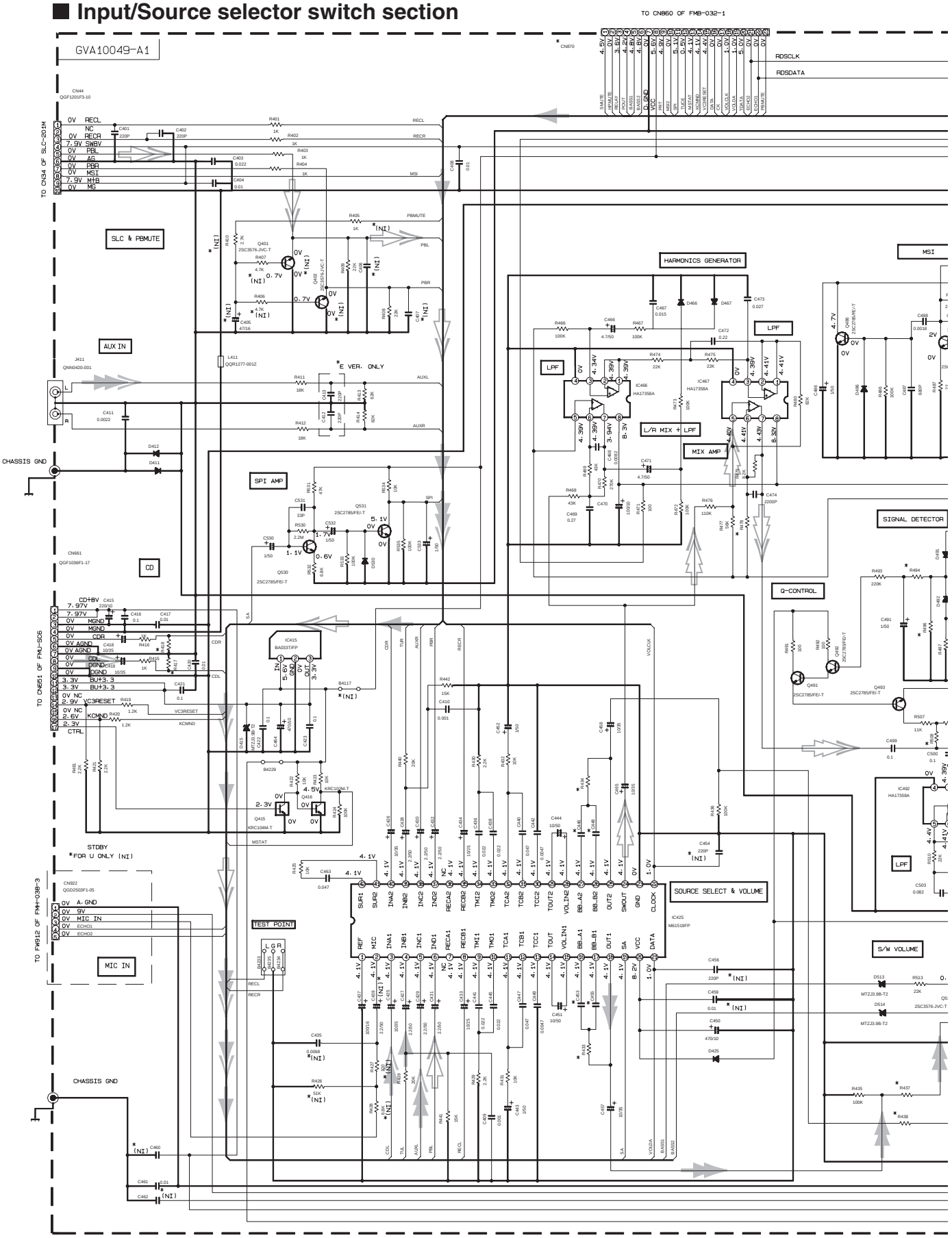
VERSIONS / REF. NAME	HX-Z10				HX-Z30			
	J, C	A, E	UJ, UW		J, C	UW		
IC701	STK412 -420	STK412 -420	STK412 -420		STK412 -420	STK412 -420		
IC602	STK432 -070	STK432 -050	STK432 -050		STK432 -070	STK432 -070		
R637, R737	330 (1/2W) UNF	150 (1/2W) UNF	100 (1W) UNF		330 (1/2W) UNF	180 (1W) UNF		
R638, R738	330 (1/2W) UNF	150 (1/2W) UNF	100 (1W) UNF		330 (1/2W) UNF	180 (1W) UNF		
R641, R743	330 (1/2W) UNF	150 (1/2W) UNF	100 (1W) UNF		330 (1/2W) UNF	180 (1W) UNF		
R723, R724 R741, R742	10K	6.8K	6.8K		10K	10K		
R303	USE	SHORT	SHORT		USE	SHORT		
R307	USE	SHORT	SHORT		USE	SHORT		
R305	USE	SHORT	SHORT		USE	SHORT		
C217	100/63	100/63	47/100		100/63	47/100		
R653, R655	USE	SHORT	SHORT		USE	USE		
C204/C205	4700 /71	4700 /63	4700 /63		4700 /71	4700 /71		
Q201	KTC2026 /DY	KTC1027 /DY/-T	KTC1027 /DY/-T		KTC2026 /DY	KTC2026 /DY		
C214/C215	2200 /50	2200 /35	2200 /35		2200 /50	2200 /50		
C203	0.01 /500	0.1 /250V	0.1 /250V		0.01 /500	0.1 /250V		
C651, C652 C734, C735	NONE	USE	USE		NONE	USE		
C736, C737 C740, C741	NONE	USE	USE		NONE	USE		
D227, D217 D218, C216	NONE	NONE	USE		NONE	USE		
D221	USE	USE	NONE		USE	NONE		
J81	GNB0170 -002	GNB0171 -001	GNB0170 -001		GNB0170 -002	GNB0170 -001		
B6008	NONE	NONE	USE		NONE	USE		
B6006	USE	USE	NONE		USE	NONE		
R650, R651 C653, C654	NONE	USE	USE		NONE	USE		

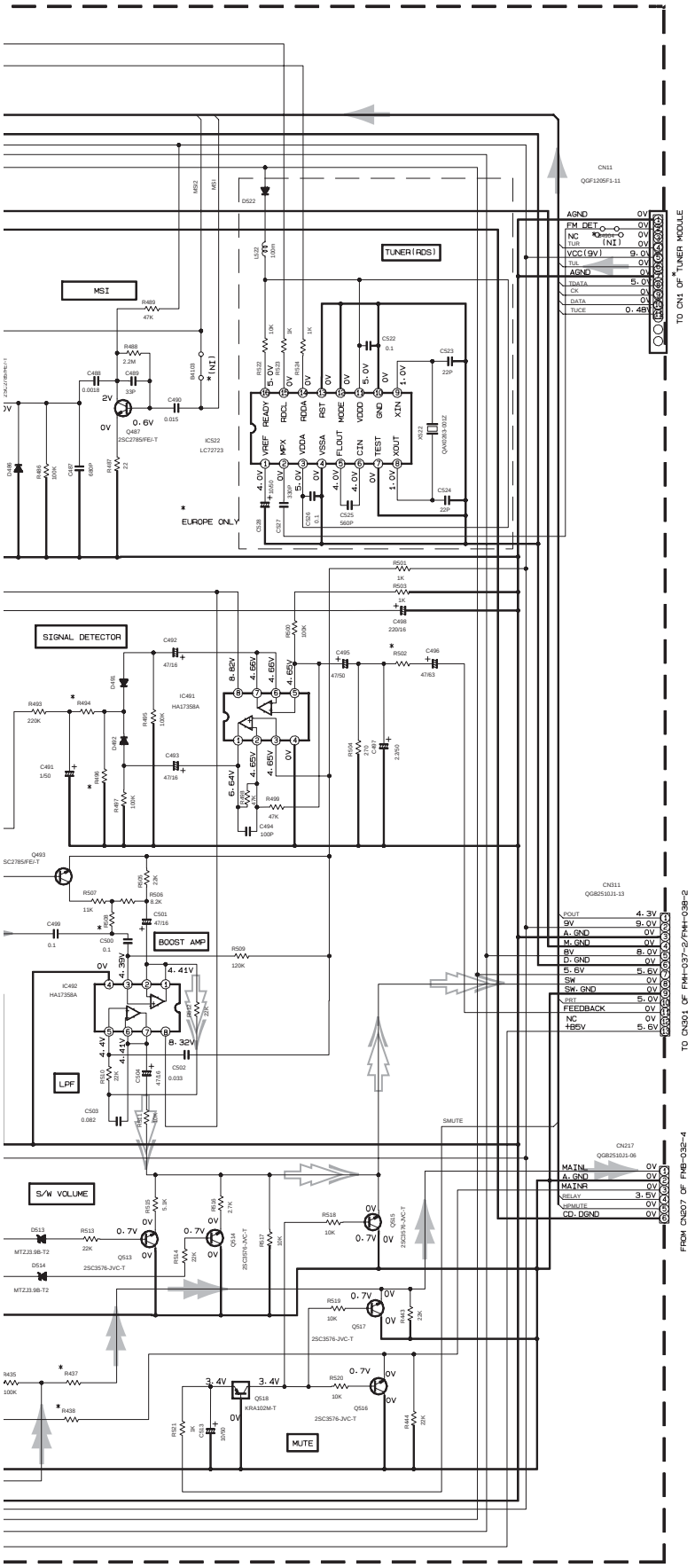
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION —— AUX MODE, VOL MIN, BASS OFF
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(=mpF).
   ALL INDUCTANCE VALUES ARE IN μH(=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS119-041-T2

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

■ Input/Source selector switch section





MARK *

MODEL	HX-Z10&HX-Z30			
VERSION	J/C	UJ/UW	A	B/E/EN/EV
CN870	QGF1205F1-21			QGF1205F1-23
L522	NOT USED			USED
D522	NOT USED			USED
R522	NOT USED			USED
R523	NOT USED			USED
R524	NOT USED			USED
R525	NOT USED			USED
R526	NOT USED			USED
X522	NOT USED			USED
C522	NOT USED			USED
C523	NOT USED			USED
C524	NOT USED			USED
C525	NOT USED			USED
C526	NOT USED			USED
C527	NOT USED			USED
C528	NOT USED			USED
C412	NOT USED			USED
C413	NOT USED			USED
TUNER MODULE	GAU0307-001			GAU0278-002

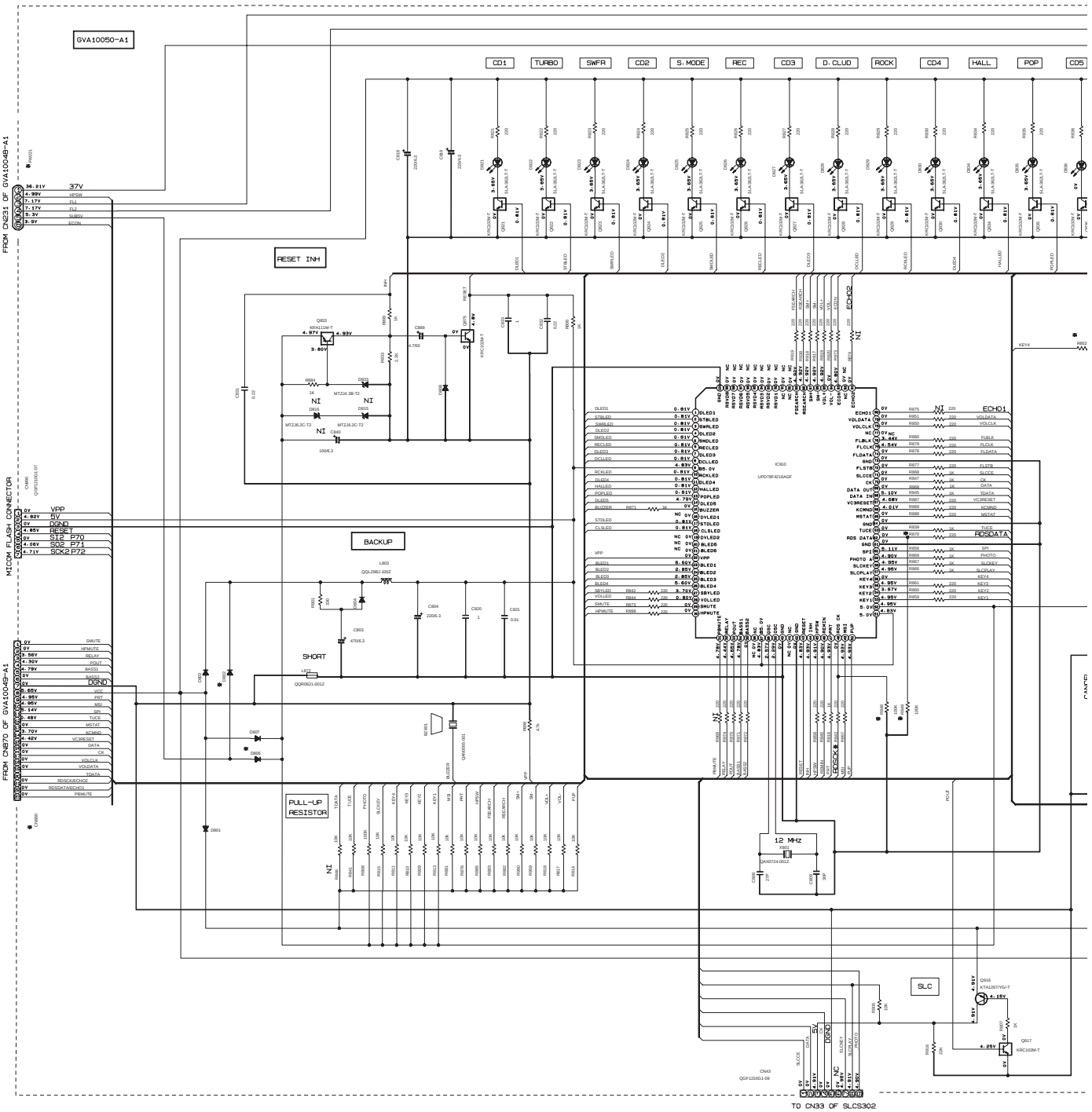
MARK *

	MODEL	HX-Z10			HX-Z30	
	VERSION	J/C	B/E/EN EV/A	UW/UJ	J/C	UW
SOUND QUALITY	R437/R438	12K	12K	18K	22K	43K
	R478	1.3K	1.3K	1.3K	1.3K	2.4K
	R494	6.8K	6.8K	6.8K	15K	15K
	R496	150K	150K	150K	180K	180K
	R502	5.6K	5.6K	5.6K	10K	10K
	R417/R418	11K	11K	11K	100K	100K
	C446/C448	0.018	0.018	0.018	0.015	0.022
	C453/C455	0.018	0.018	0.018	0.015	0.022
	R508	1.5K	1.5K	1.5K	3.6K	1.5K
	R433/R434	51K	51K	51K	51K	47K

TUNER SIGNAL
CD SIGNAL
TAPE SIGNAL
AUX IN SIGNAL
MAIN SIGNAL
SUBWOOFER SIGNAL

NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION ---- AUX MODE, VOL MIN, SUBWOOFER VOL 1.
2. UNLESS OTHERWISE SPECIFIED
RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN #F(P=pF).
ALL INDUCTANCE VALUES ARE IN #H(m=mH).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (#F)/RATED VOLTAGE (V).
ALL DIODES ARE 1SS119-041-T2
3. NI - COMPONENT NOT INSERT

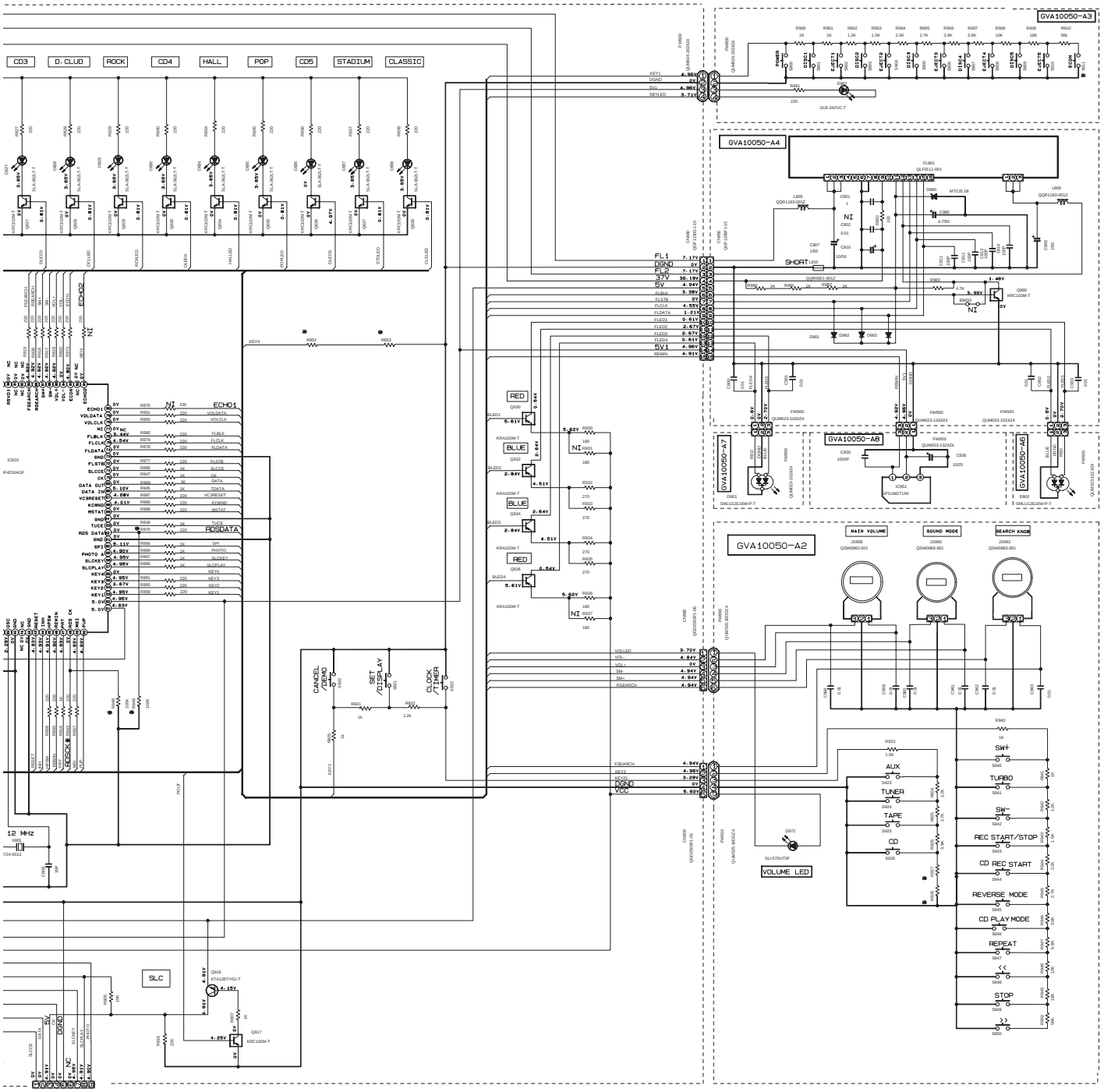
■ Micon section



MARK

REF NO. \ VERSION	HX-Z10 B·E·EN·EV	HX-Z10 A	HX-Z10 J·C	HX-Z10 UJ	HX-Z10 UW	HX-Z30 REF NO. \ VERSION	HX-Z30 J·C	HX-Z30 UW
CN860	QGF1205F1-23	QGF1205F1-21	QGF1205F1-21	QGF1205F1-21	QGF1205F1-21	CN860	QGF1205F1-21	QGF1205F1-21
FW221	QUM156-15DGZ4	QUM154-15DGZ4	QUM154-15DGZ4	QUM154-15DGZ4	QUM154-15DGZ4	FW221	QUM154-15DGZ4	QUM154-15DGZ4
R843, R870	USE	NONE	NONE	NONE	NONE	R843, R870	NONE	NONE
D802, D806	USE	USE	NONE	NONE	NONE	D802, D806	NONE	NONE
R852	BUS WIRE	1K	BUS WIRE	BUS WIRE	2.2K	R852	BUS WIRE	2.2K
R853	1K	2.2K	BUS WIRE	4.7K	4.7K	R853	BUS WIRE	4.7K
R927	5.6K	5.6K	5.6K	5.6K	5.6K	R927	30K	30K
R928	10K	10K	10K	10K	10K	R928	3.6K	3.6K
S911	USE	NONE	NONE	NONE	NONE	S911	NONE	NONE

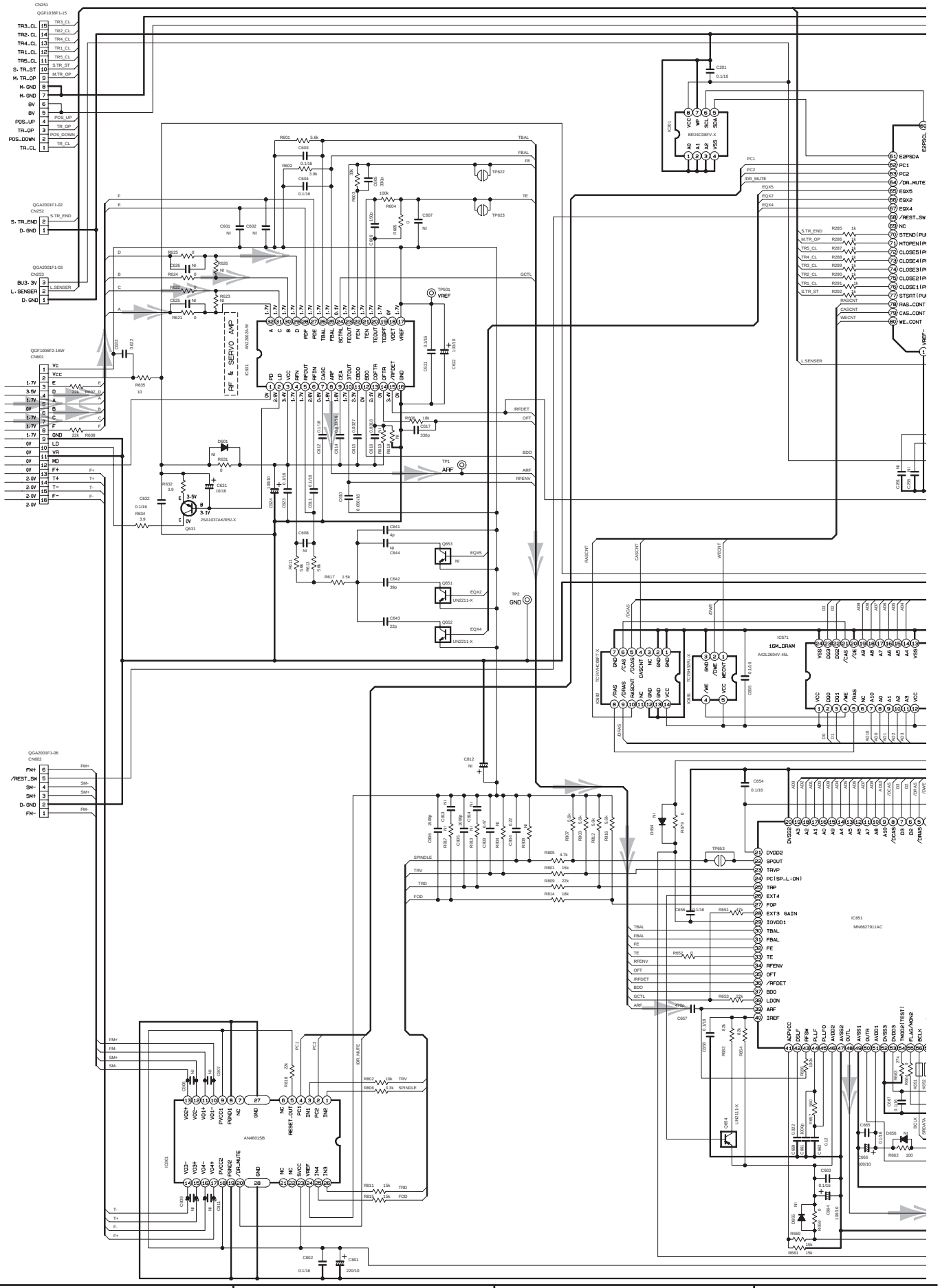
NOTE: 1. CN990 ONLY USE FOR FLASH MICOM

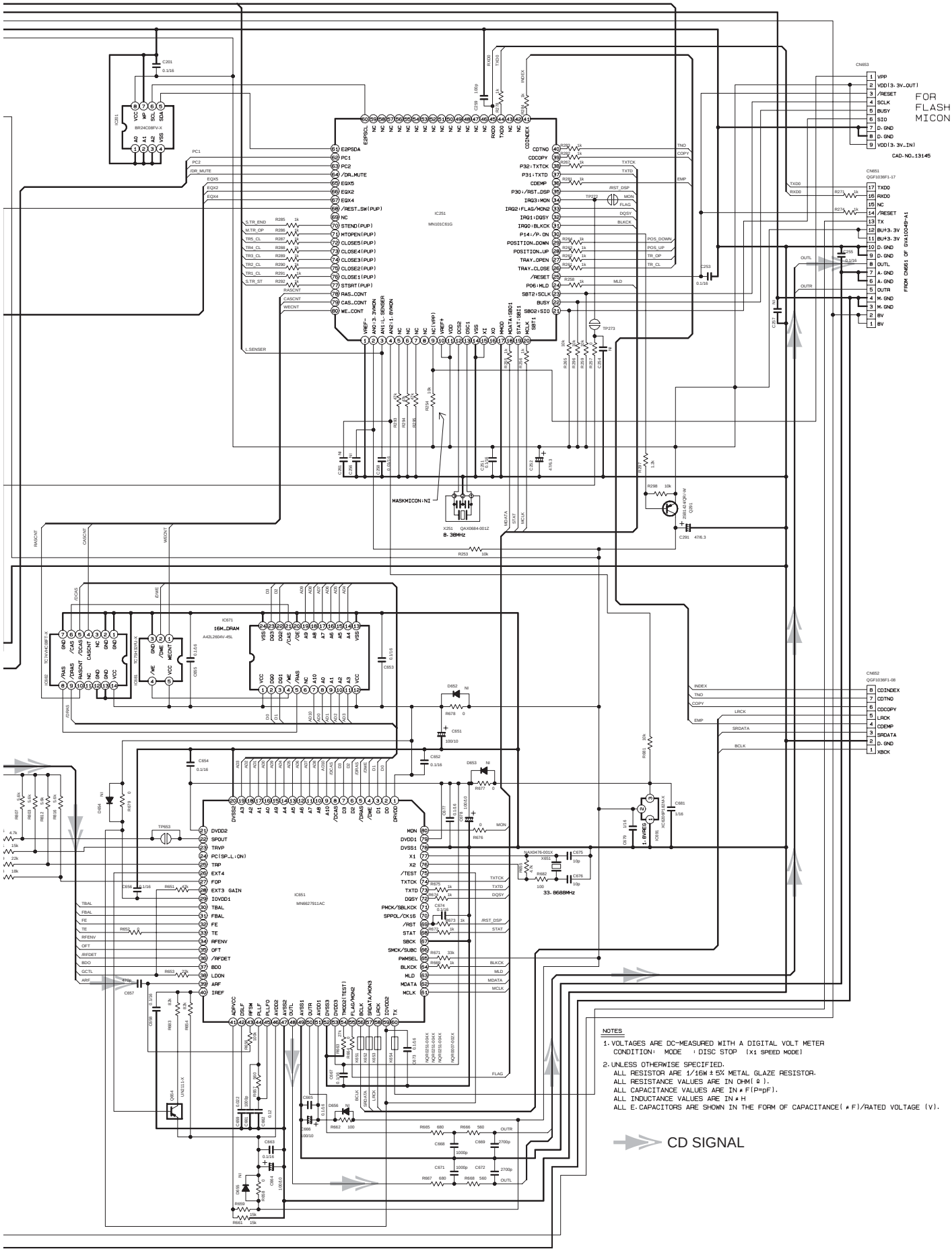


NOTES

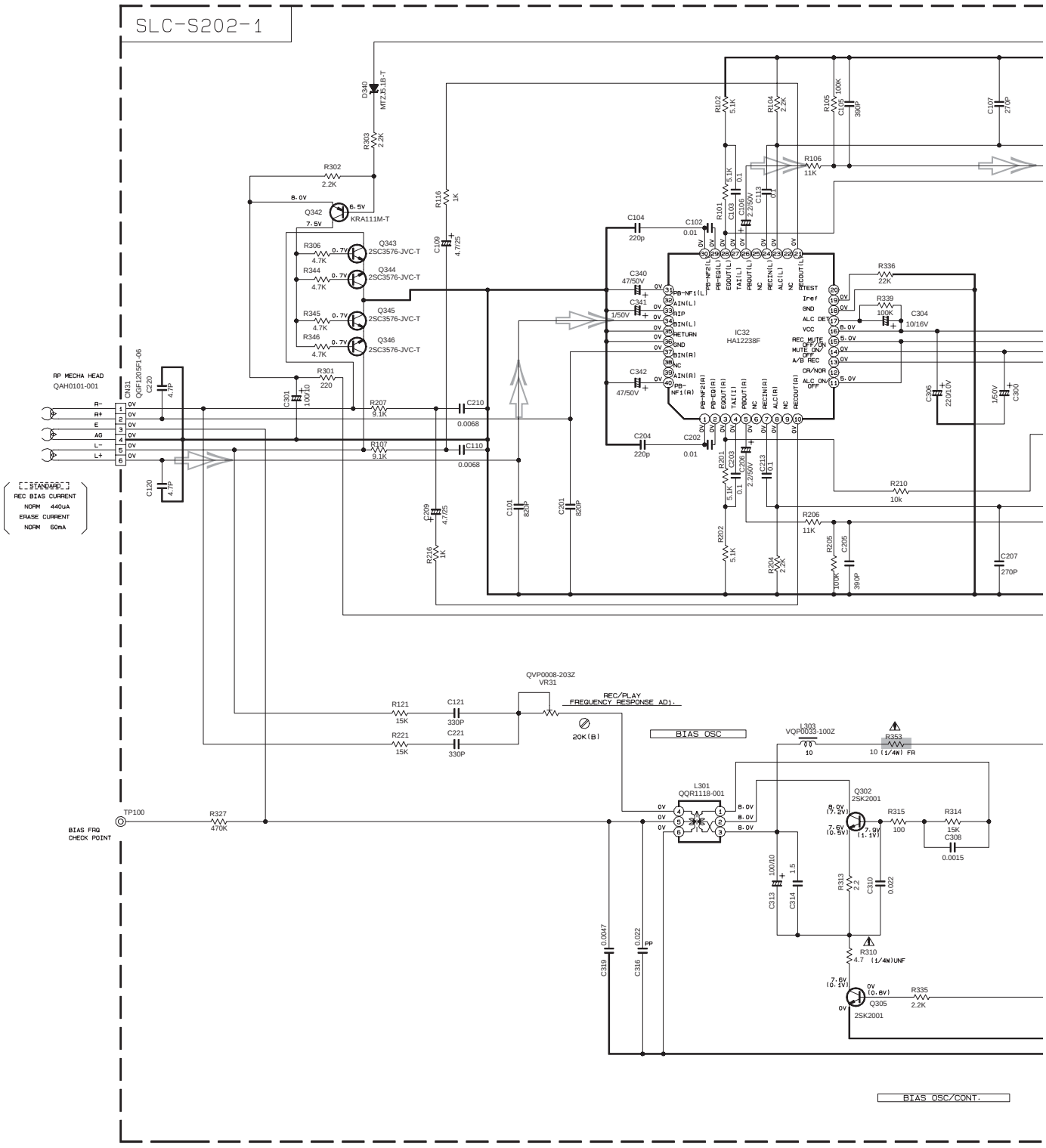
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION ——— AUX MODE, VOL MIN, BASS OFF
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/4W ± 5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN mH(m=mH).
   ALL C CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODE ARE 1SS119-041-T2
   ALL TACT SWITCH ARE GSW0674-001Z
   NI ———> COMPONENT NOT INSERT
   SHORT ——> REPLACE BY BUS WIRE .

■ CD servo control section




FOR FLASH MICON
CAD.NO.13145
FROM CN851 OF GVA1004B-A1
IC251
MN101C61G
IC651
MN6627911AC
IC871
16M_DRAM
A42L2604V-45L
X251 QAX0684-001Z
8.38MHz
X651 XWD0476-001X
33.8688MHz
MASKMICON:NI
NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
CONDITION: MODE : DISC STOP (x1 SPEED MODE)
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTOR ARE 1/16W ± 5% METAL GLAZE RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL INDUCTANCE VALUES ARE IN μH
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).
CD SIGNAL

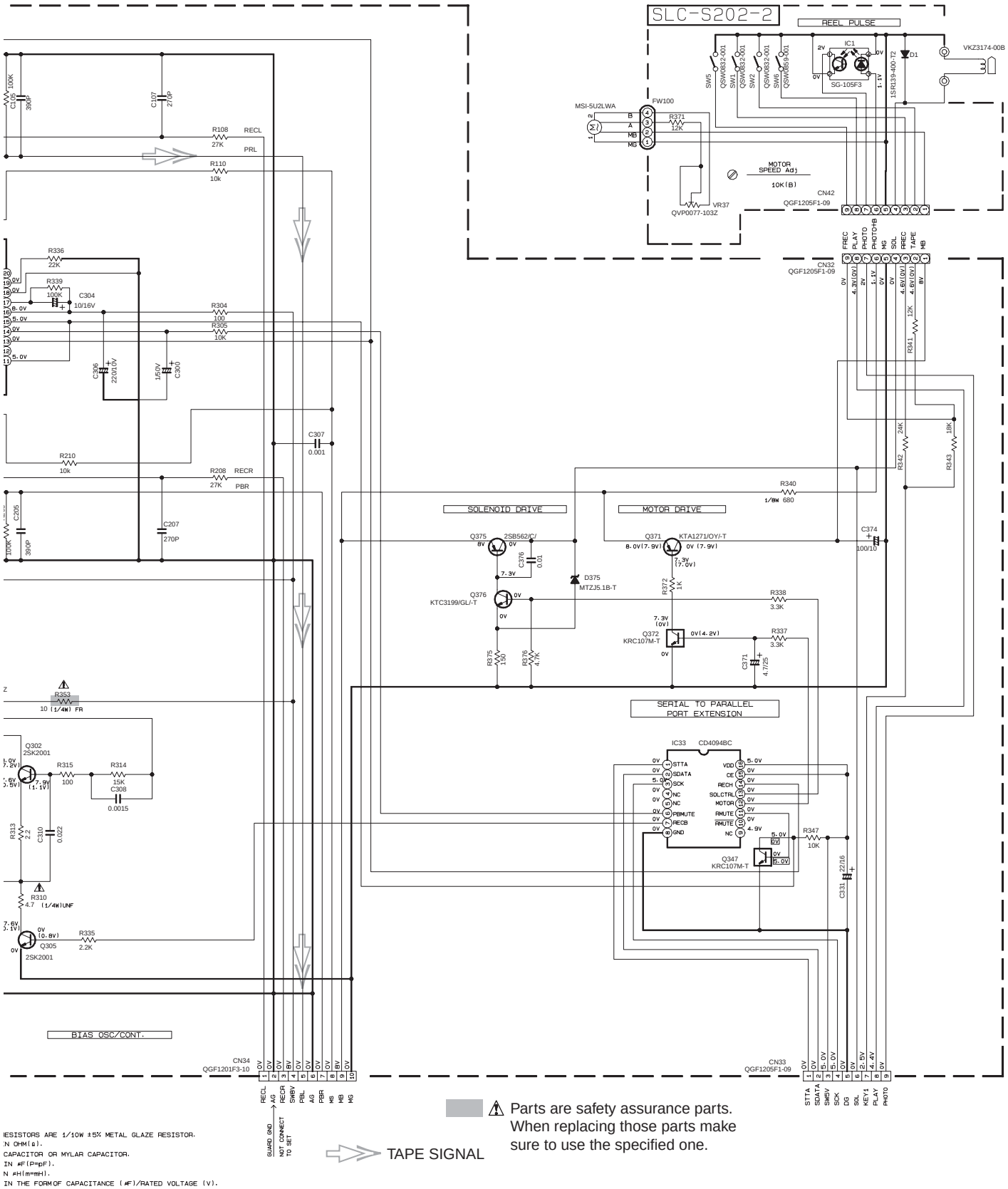
■ Cassette mechansim control section



NOTES

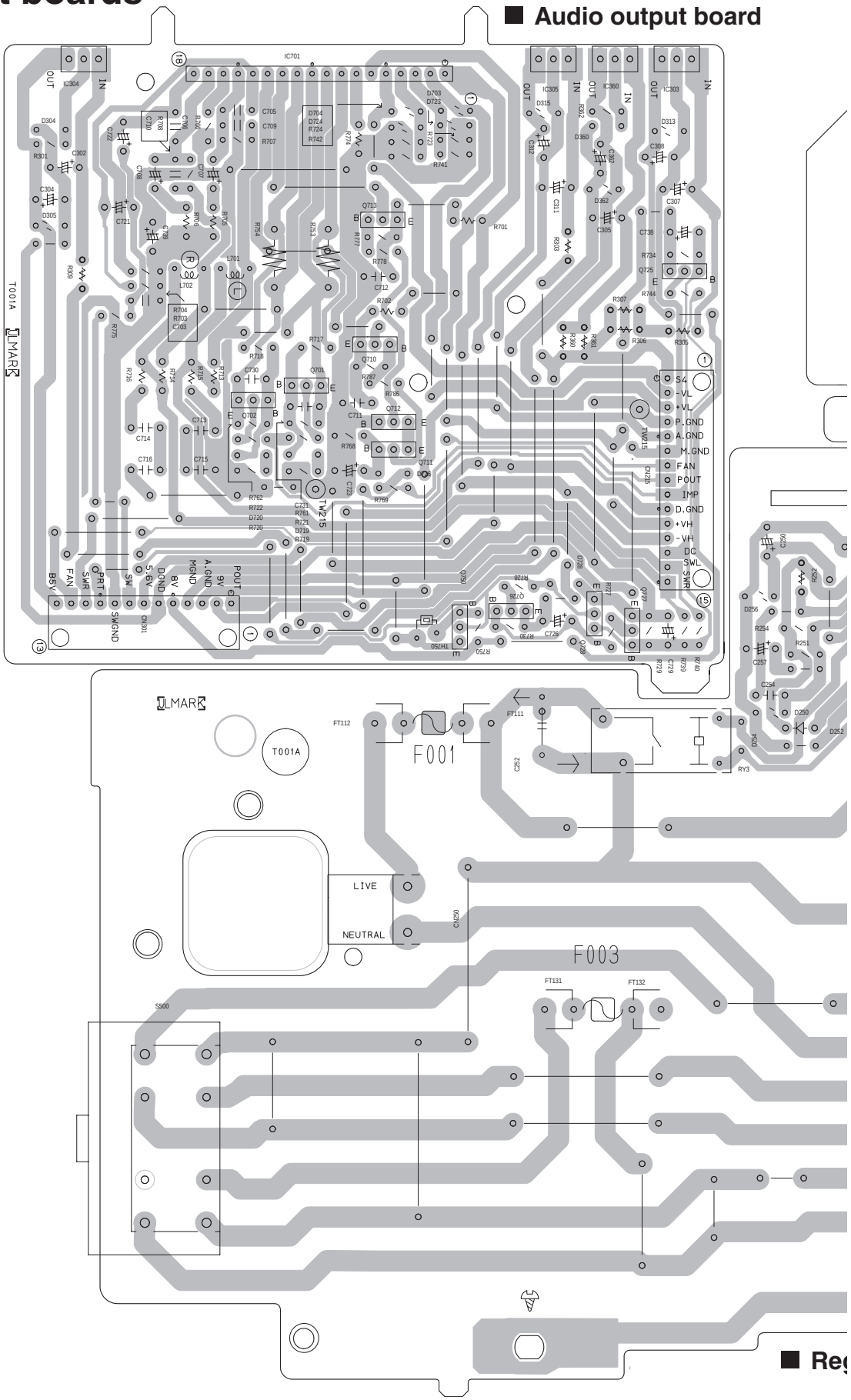
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION : MECHA STOP MODE

2. UNLESS OTHERWISE SPECIFIED · RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL INDUCTANCE VALUES ARE IN μH(m=mH).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE
‖ POLYPROPYLENE CAPACITOR


SLC-S202-2
REEL PULSE
IC1
SG-105F3
VKZ3174-00B
D1
SW5 QSW0832-001
SW1 QSW0832-001
SW2 QSW0832-001
SW6 QSW0869-001
FW100
MSI-5U2LWA
R371 12K
MOTOR SPEED Adj 10K(B)
VR37 QVP0077-103Z
CN42 QGF1205F1-09
CN32 QGF1205F1-09
FREC PLAY PHOTO MG SOL PREC TAPE MB
R341 12K
R342 24K
R343 18K
R340 1/8W 680
SOLENOID DRIVE
MOTOR DRIVE
Q375 2SB562/C/
Q371 KTA1271/OY/-T
C374 100/10
C376 0.01
D375 MTZJ5.1B-T
R372 1K
Q376 KTC3199/GL/-T
R338 3.3K
Q372 KRC107M-T
R337 3.3K
R375 150
R376 4.7K
C371 4.7/25
SERIAL TO PARALLEL PORT EXTENSION
IC33 CD4094BC
STTA SDATA SCK NC NC PBMUTE RECB GND
VDD CE RECH SOLCTRL MOTOR RMUTE RMUTE NC
R347 10K
Q347 KRC107M-T
C331 22/16
R353 10 (1/4W) FR
Q302 2SK2001
R315 100
R314 15K
C308 0.0015
R313 2.2
C310 0.022
R310 4.7 (1/4W)UNF
Q305 2SK2001
R335 2.2K
BIAS OSC/CONT.
R336 22K
R339 100K
C304 10/16V
R304 100
R305 10K
C306 2201.0V
C300 1F50V
C307 0.001
R210 10k
R208 27K RECR
PBR
R108 27K RECL
PRL
R110 10k
C105 100K
390P
C107 270P
C205 100K
390P
C207 270P
CN34 QGF1201F3-10
RECL AG RECR SWBV PBL AG PBR MS MB MG
GUARD GND
NOT CONNECT TO SET
CN33 QGF1205F1-09
STTA SDATA SWSV SCK DG SOL KEY1 PLAY PHOTO
TAPE SIGNAL
Parts are safety assurance parts. When replacing those parts make sure to use the specified one.
ESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
.N OHM(Ω).
CAPACITOR OR MYLAR CAPACITOR.
IN μF(P=pF).
N μH(m=mH).
IN THE FORMOF CAPACITANCE (μF)/RATED VOLTAGE (V).

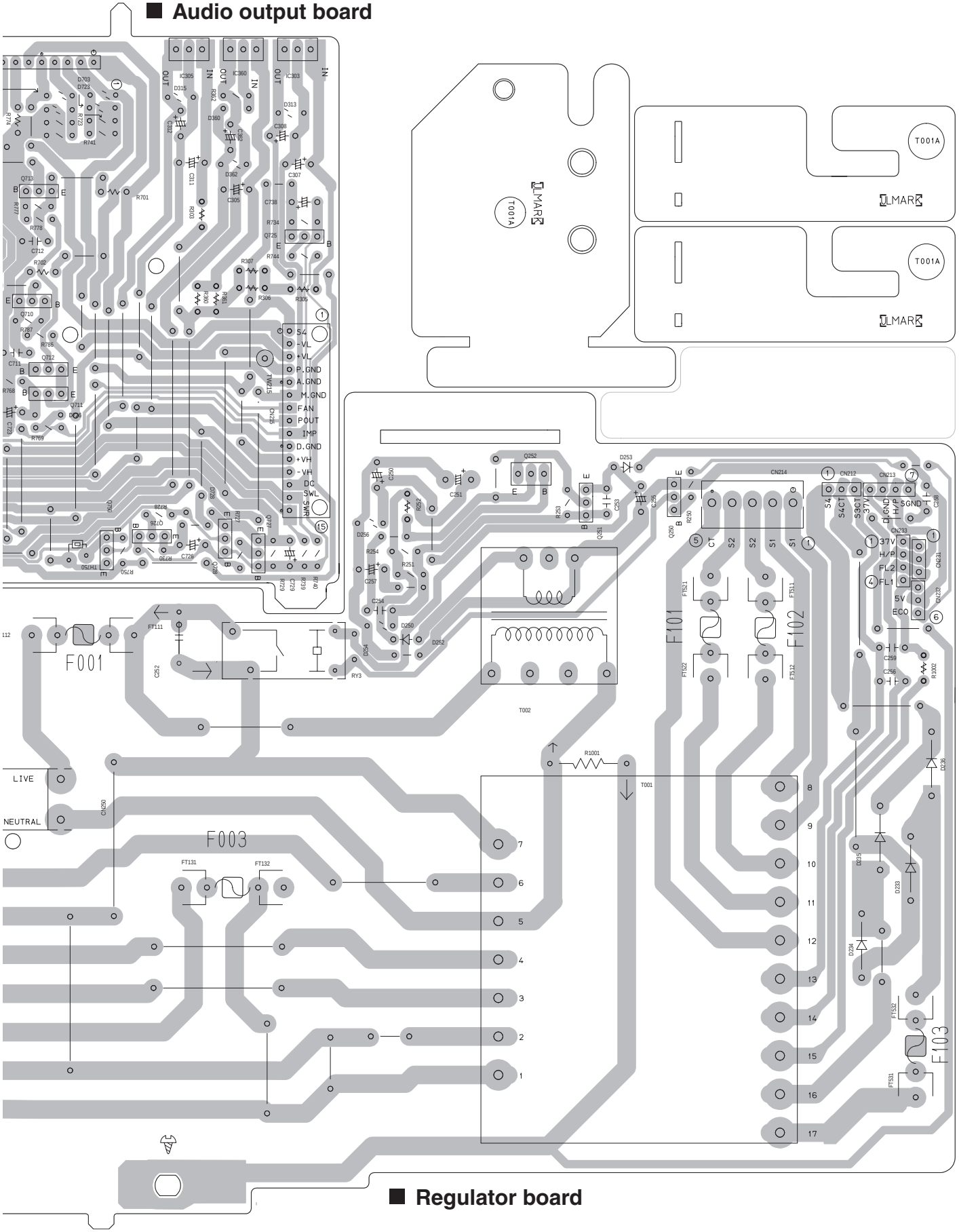
Printed circuit boards

■ Audio output board



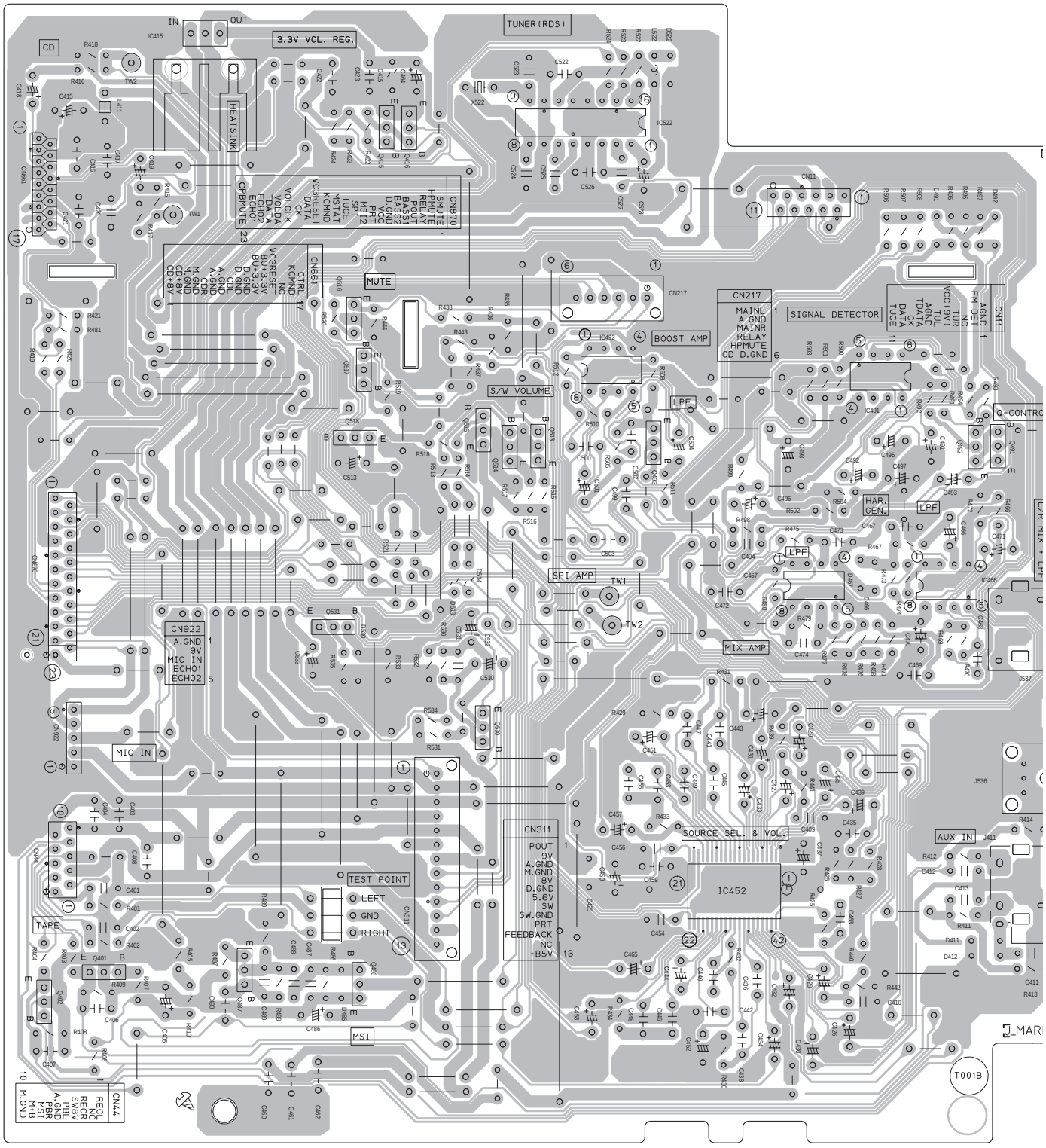
■ Reg

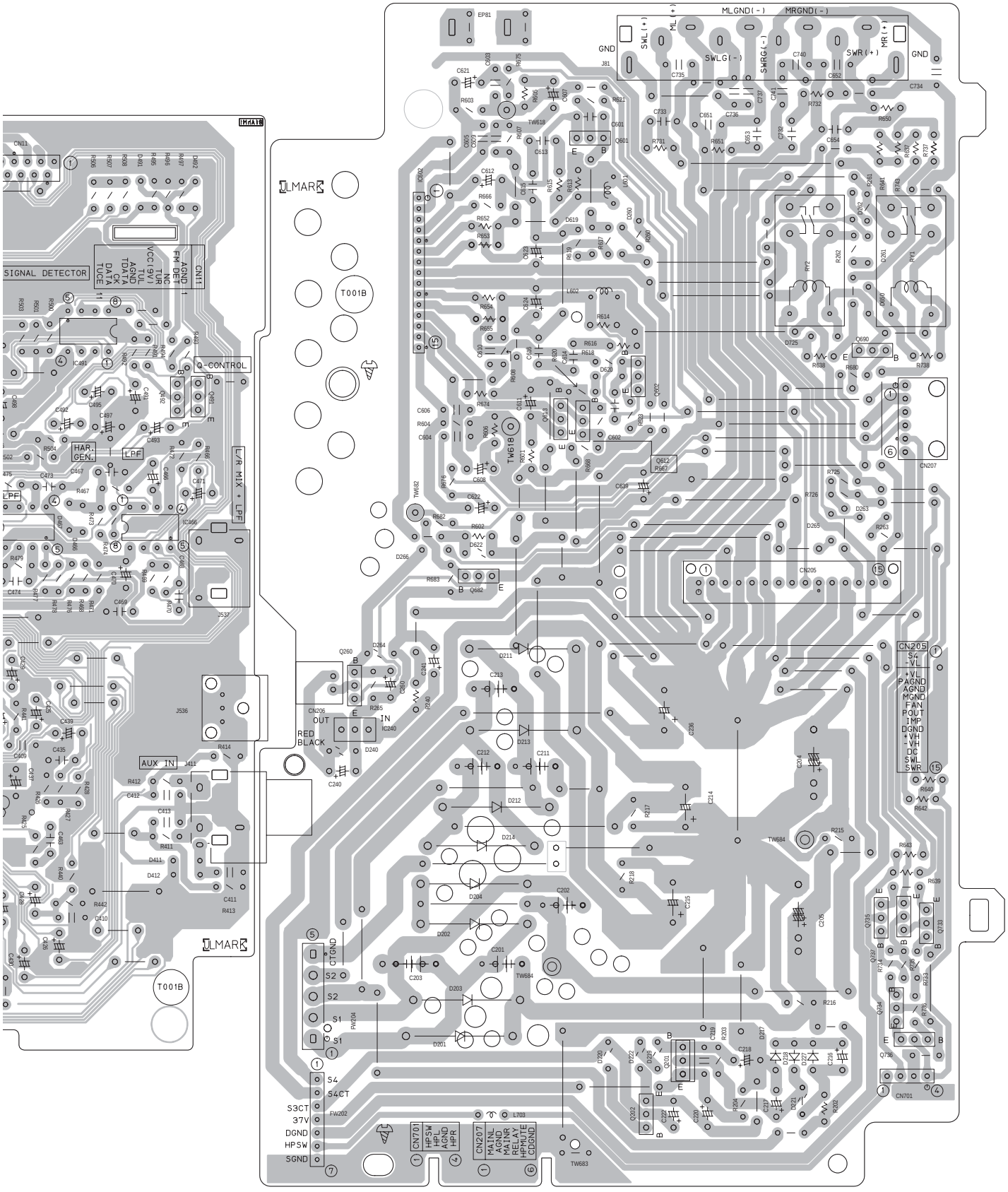
■ Audio output board



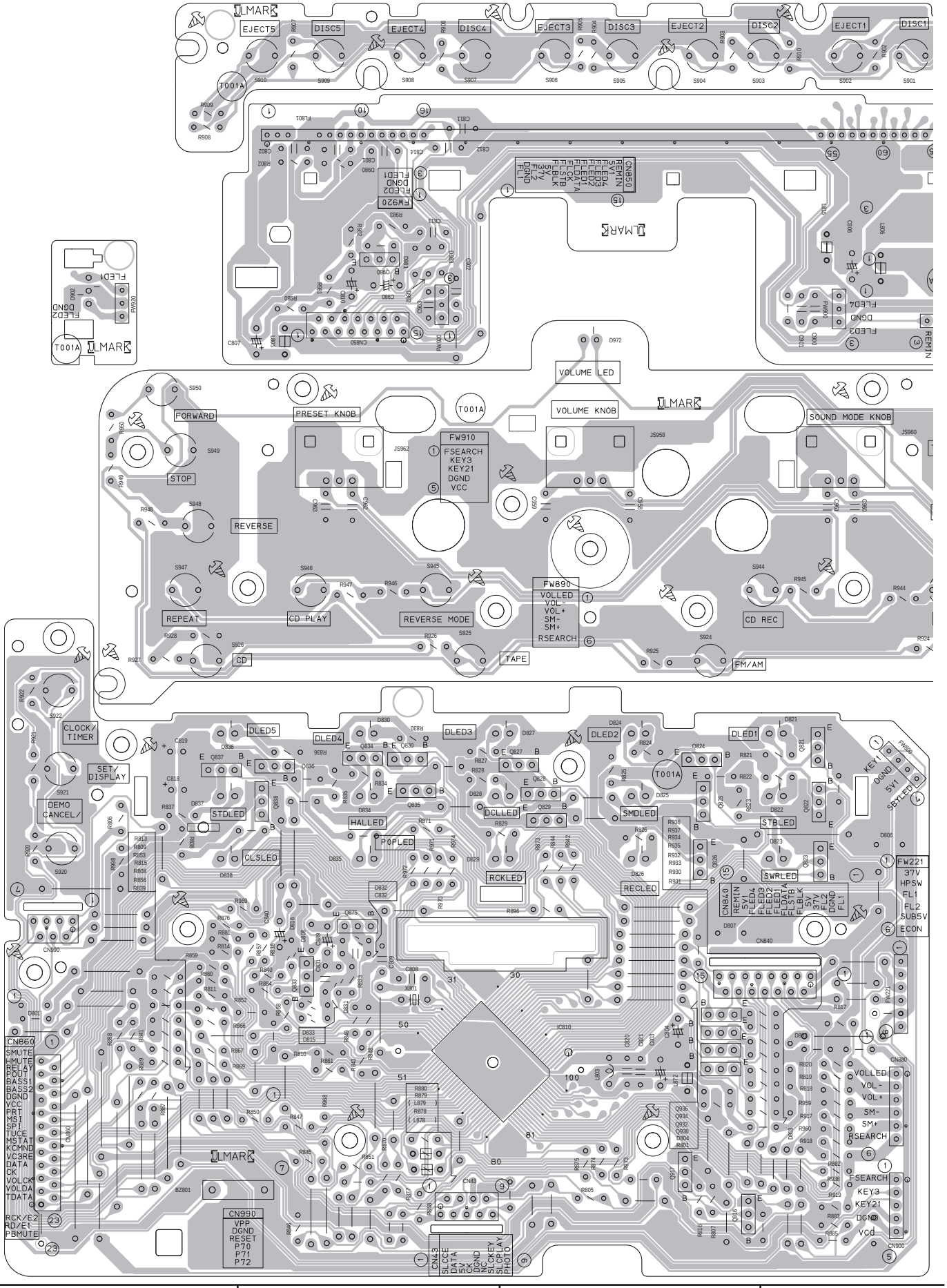
■ Regulator board

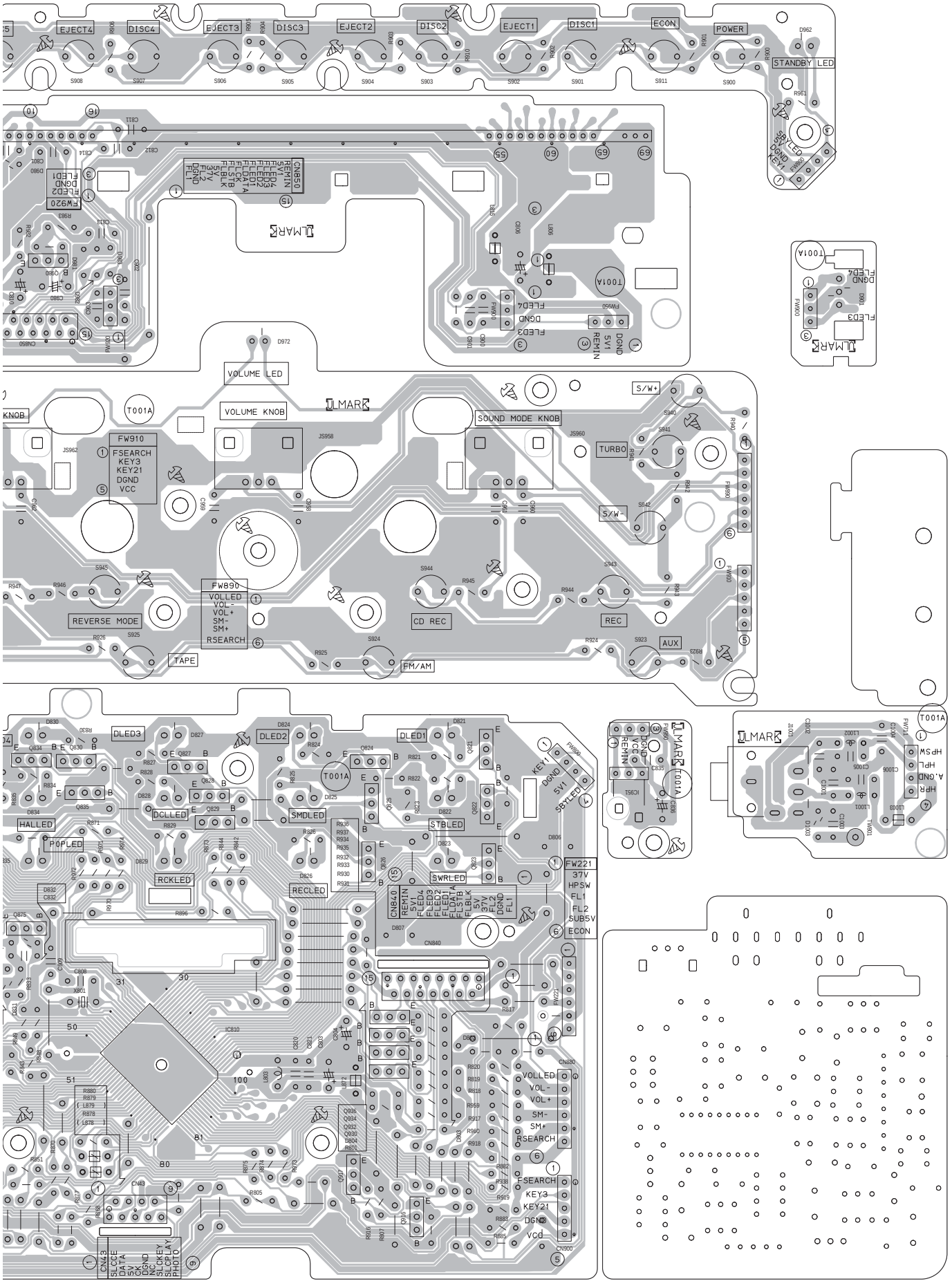
■ Input/Source selector switch board




SIGNAL DETECTOR
CN11
Q-CONTROL
L/R MIX + LPF
HAR. GEN.
LPF
AUX IN
T001B
CN206
OUT
IN
RED
BLACK
CN701
HPSW
HPL
AGND
HPR
CN207
MAINL
AGND
MAINR
RELAY
HPMUTE
CDGND
CN205
DGND
SGND
S1
S2
S3CT
S4
S4CT
37V
FW202
FW204
MLGND(-)
MRGND(-)
SWLG(-)
SWRG(-)
GND
TW618
TW682
TW684
TW683

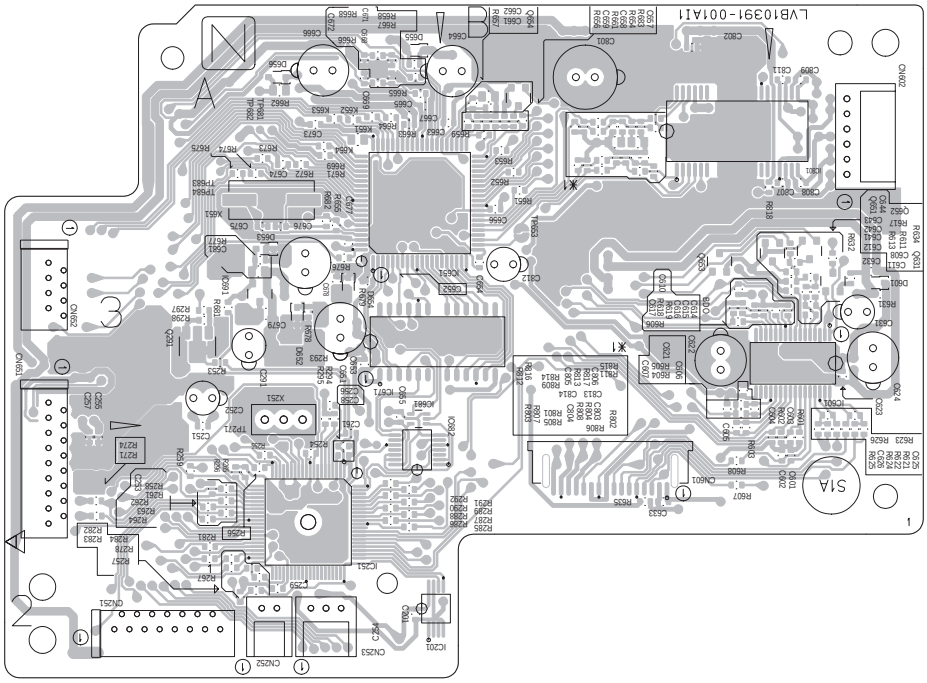
■ Micon board


EJECT5
DISC5
EJECT4
DISC4
EJECT3
DISC3
EJECT2
DISC2
EJECT1
DISC1
VOLUME LED
FORWARD
PRESET KNOB
VOLUME KNOB
SOUND MODE KNOB
STOP
REVERSE
REPEAT
CD PLAY
REVERSE MODE
CD REC
CD
TAPE
FM/AM
CLOCK/ TIMER
SET/ DISPLAY
DEMO CANCEL/
FW910
FSEARCH
KEY3
KEY21
DGND
VCC
FW890
VOLLED
VOL-
VOL+
SM-
SM+
RSEARCH
FW221
37V
HPSW
FL1
FL2
5UB5V
ECON
CN860
SMUTE
HMUTE
RELAY
POUT
BASS1
BASS2
DGND
VCC
PRT
MSI
SPI
TUCE
MSTAT
KCMND
VC3RE
DATA
CK
VOLCK
VOLDA
TDATA
RCK/E2
RDAT
PBMUTE
CN990
VPP
DGND
RESET
P70
P71
P72
CN43
SLCCE
DATA
CK
DGND
NC
SLCKEY
SLCPLAY
PHOTO
CN840
REMIN
SV01
FLED4
FLED3
FLED2
FLED1
FLDATA
FLSTB
FLCLK
37V
FL2
DGND
FL1
CN650
REMIN
SV1/2
FLED4
FLED3
FLED2
FLED1
FLDATA
FLSTB
FLCLK
37V
FL2
DGND
FL1
FW920
FLED2
DGND
FLED1
FW930
FLED4
DGND
FLED3
DLED5
DLED4
DLED3
DLED2
DLED1
STDLED
HALLED
P0PLED
CLSLED
DCLLED
RCKLED
SMDLED
RECLED
STBLED
SWRLED
KEY1
DGND
5V1
5PTLED
T001A
LMAR

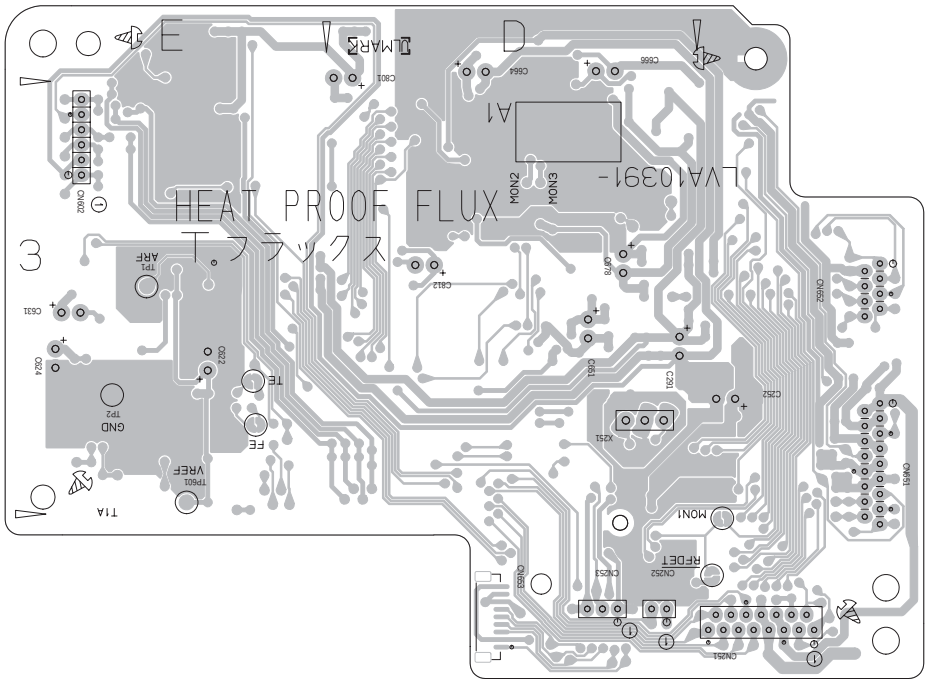

EJECT4
DISC4
EJECT3
DISC3
EJECT2
DISC2
EJECT1
DISC1
ECON
POWER
STANDBY LED
VOLUME LED
VOLUME KNOB
SOUND MODE KNOB
REVERSE MODE
TAPE
FM/AM
CD REC
REC
AUX
TURBO
S/W+
S/W-
DLED3
DLED2
DLED1
STBLED
SWRLED
SMDLED
RECLED
RCKLED
DCLLED
POPLED
HALLED
FW910
FW890
FW221
CN840
CN650
CN3
T001A
IMAR

■ CD servo control board

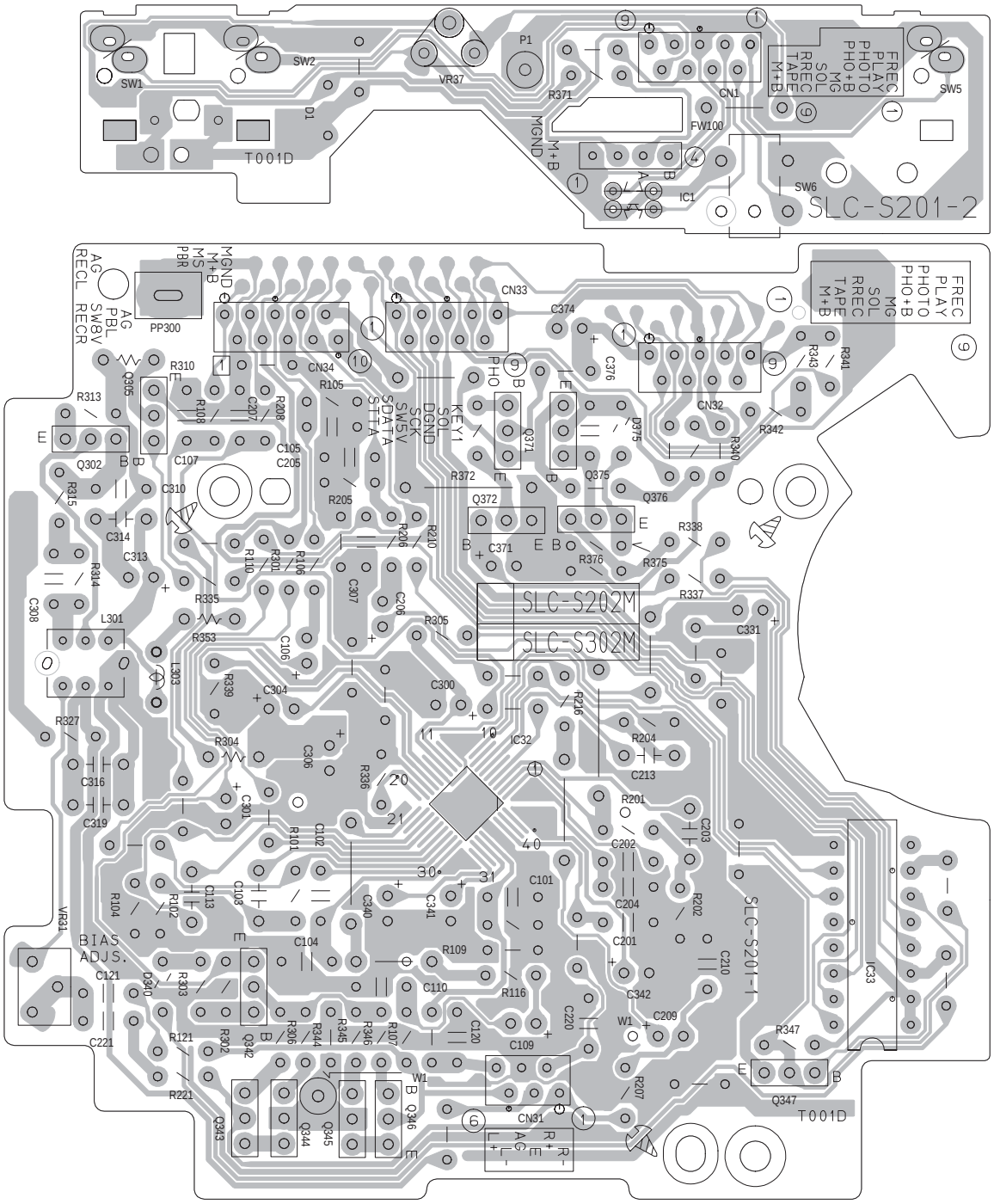
(Forward side)



(Reverse side)



■ Cassette control board



JVC

VICTOR COMPANY OF JAPAN, LIMITED

AV & MULTIMEDIA COMPANY AUDIO/VIDEO SYSTEMS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.22067SCH)

Printed in Japan
WPC

PARTS LIST

[HX-Z30]

* All printed circuit boards and its assemblies are not available as service parts.

Area suffix

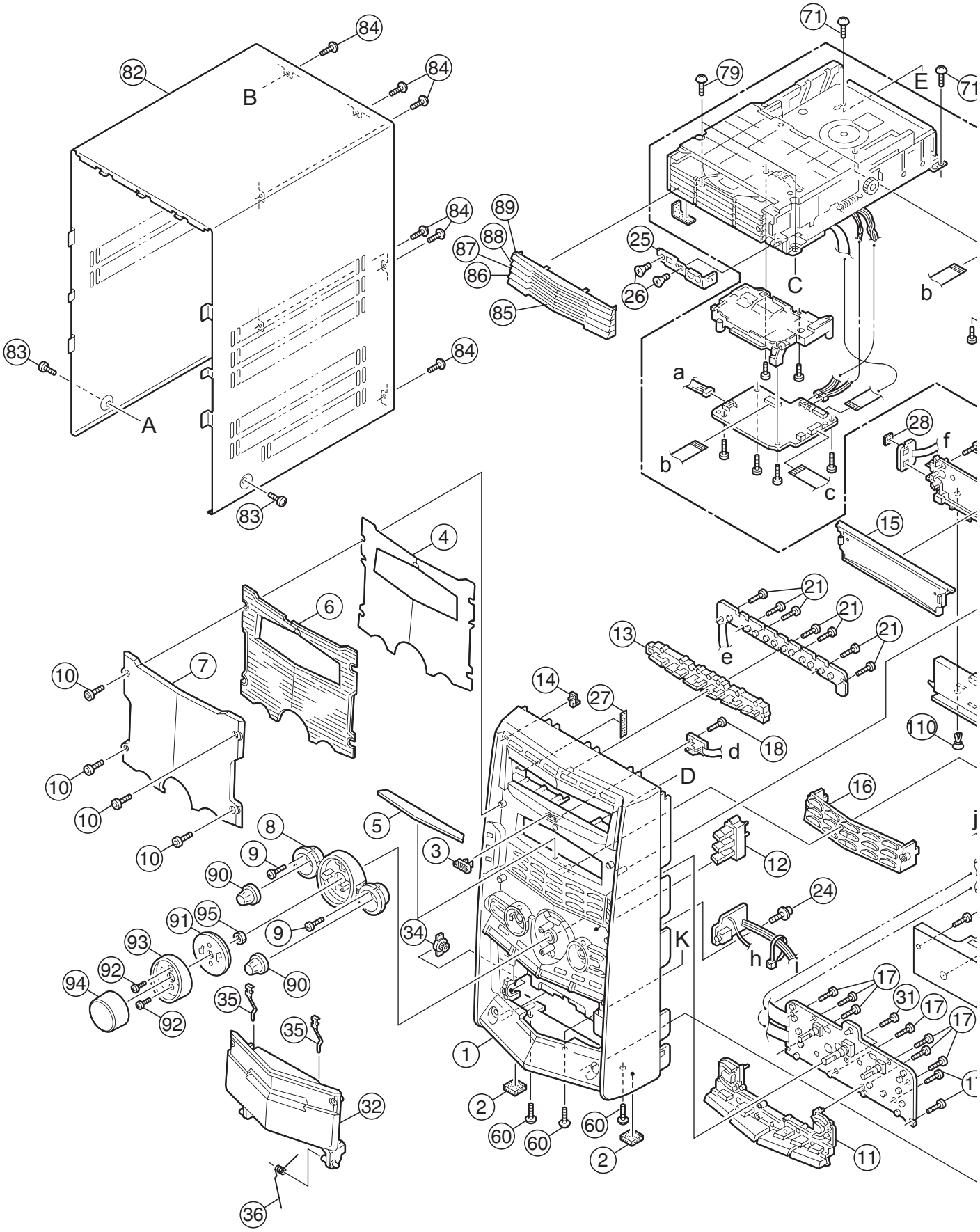
J ---------- U.S.A.
C ---------- Canada

- Contents -

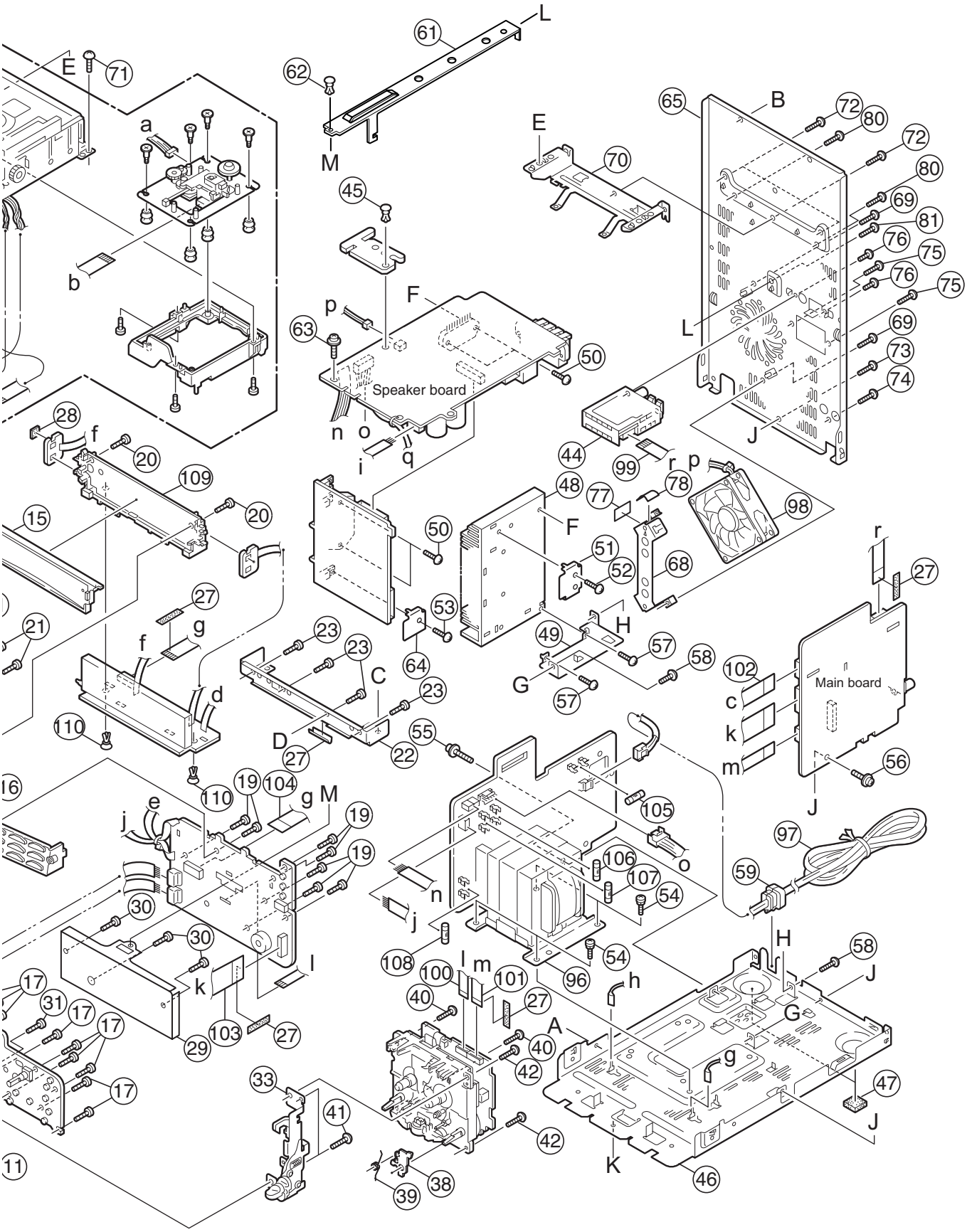
Exploded view of general assembly and parts list (Block No.M1) ---------- 3- 2
Speaker assembly and parts list (Block No.M2) ---------- 3- 5
CD changer mechanism assembly and parts list (Block No.MA) ---------- 3- 6
CD mechanism assembly and parts list (Block No.MB) ---------- 3- 8
Cassette mechanism assembly and parts list (Block No.MP) ---------- 3- 9
Electrical parts list (Block No.01~07) ---------- 3-11
Packing materials and accessories parts list (Block No.M3) ---------- 3-20

Exploded view of general assembly and parts list

Block No. M 1 M M



M



General assembly

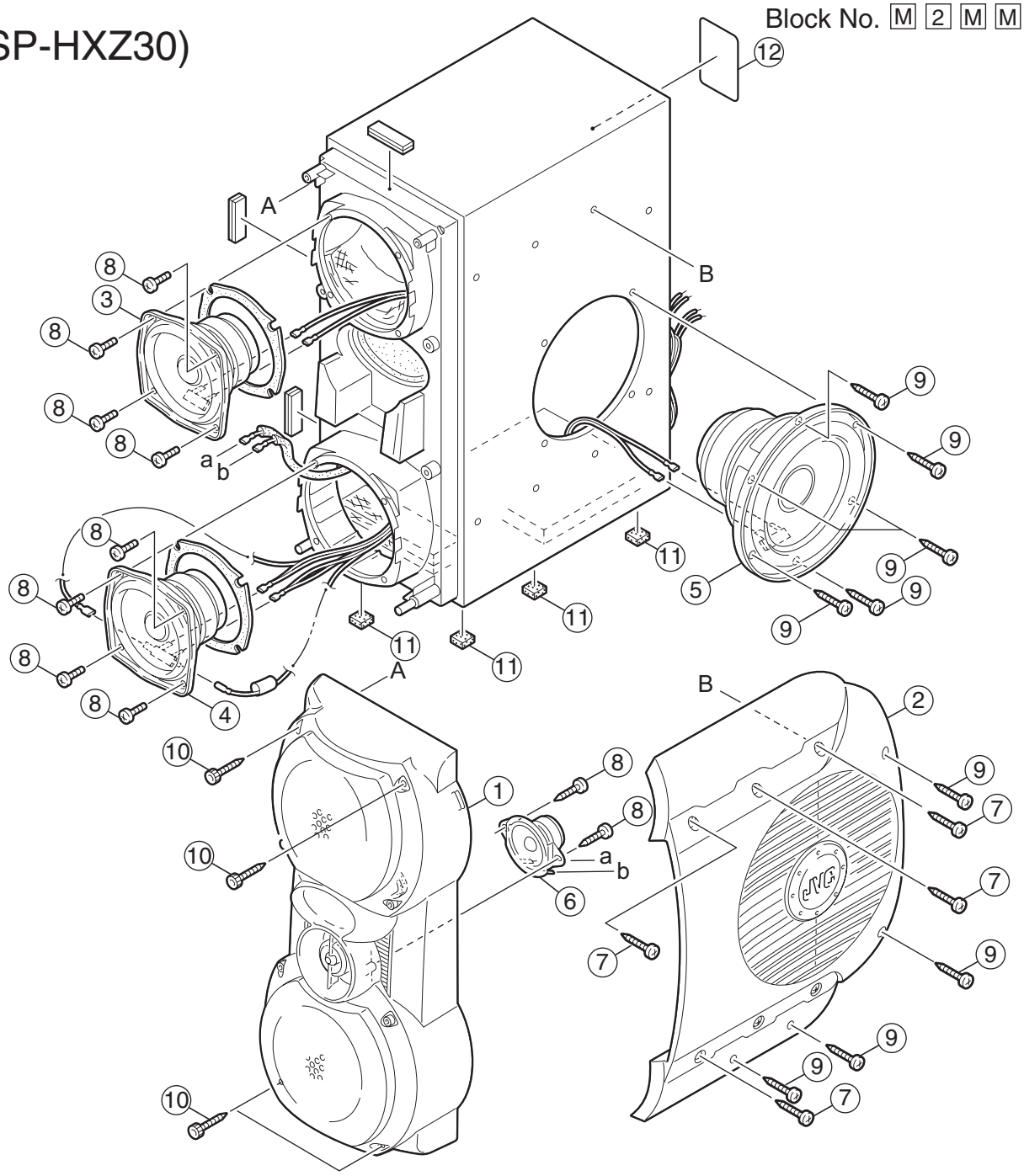
Block No. [M][1][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	GV10129-001A	FRONT PANEL		
2	GV40313-001A	FELT SPACER	(x2)	
3	GV40077-002A	JVC BADGE		
4	GV30417-002A	PUNCHING NET		
5	GV40382-001A	MIRROR SHEET		
6	GV20213-001A	INNNER LENS		
7	GV20208-002A	WINDOW SCREEN		
8	GV20215-001A	ORNAMENT RING		
9	QYSDSF2608Z	SCREW	2.6mm x 8mm(x2)	
10	LV40744-001A	SOCKET BOLT	(x4)	
11	GV10132-001A	CONTROL BUTTON		
12	GV30415-001A	FUNCTION BUTTON		
13	GV20172-002A	PWR/EJCT BTN A		
14	GV40381-001A	STANDBY INDICAT		
15	GV30416-001A	FL LENS		
16	GV20214-001A	FUNCTION LENS		
17	QYSDSF2608Z	SCREW	2.6mm x 8mm(x9)	
18	QYSDSF2608Z	SCREW	2.6mm x 8mm	
19	QYSDSF2608Z	SCREW	2.6mm x 8mm(x7)	
20	QYSDSF2608Z	SCREW	2.6mm x 8mm(x2)	
21	QYSDSF2608Z	SCREW	2.6mm x 8mm(x7)	
22	GV30418-002A	STAY BRACKET		
23	QYSDSF2608Z	SCREW	2.6mm x 8mm(x4)	
24	E65923-003	TAPPING SCREW		
25	GV30434-001A	MECHA BRACKET		
26	QYSSST3006Z	SCREW	3mm x 6mm(x2)	
27	GV40121-004A	SPECER	(x6)	
28	GV40418-002A	SPECER		
29	GV30488-001A	FRONT BRACKET		
30	QYSDSF2608Z	SCREW	2.6mm x 8mm(x3)	
31	QYSDSF2608Z	SCREW	2.6mm x 8mm	
32	GV30310-001A	CASS.HOLD.ASSY.		
33	GV30311-002A	EJECT SYS.ASSY.		
34	GV40034-001A	DAMPER ASSY.		
35	VKY4180-401	CASSETTE SPRING	(x2)	
36	GV40398-001A	SPRING		
38	VKL7850-002	EJECT SAFTY(R)		
39	VKW5258-003	TORSION SPRING		
40	QYSBSF3012Z	TAP SCREW	3mm x 12mm(x2)	
41	QYSBSF3010Z	TAP SCREW	3mm x 10mm(x2)	
42	QYSBSG3010Z	TAPPING SCREW	3mm x 10mm(x2)	
44	QAU0307-001	TUNER ASSY.		
45	E310243-002	PLASTIC RIVET		
46	GV10111-002A	CHASSIS BASE		
47	GV40313-002A	FELT SPACER	(x2)	
48	GV30420-004A	HEAT SINK		
49	GV30281-001A	BASE BRACKET		
50	QYSBSG3020E	TAPPING SCREW	3mm x 20mm(x4)	
51	GV40297-002A	LEAF SPRING		
52	QYSBSG3014E	TAPPING SCREW	3mm x 14mm	
53	QYSBSG3014E	TAPPING SCREW	3mm x 14mm	
54	QYSDSTL4008Z	ASSY SCREW	4mm x 8mm(x4)	
55	QYSBSFG3016Z	SCREW	3mm x 16mm	
56	QYSBSGG3008E	TAPPING SCREW	3mm x 8mm	
57	QYSBSG3014E	TAPPING SCREW	3mm x 14mm(x2)	
58	QYSBSG3008E	TAP SCREW	3mm x 8mm(x2)	
59	QZW0033-001	STRAIN RELIEF		
60	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x3)	
61	GV30286-001A	INNER BAR		
62	E310243-002	PLASTIC RIVET		
63	QYSBSGG3008E	TAPPING SCREW	3mm x 8mm	
64	GV40300-002A	BRACKET		
65	GV10131-006A	REAR PANEL		
68	GV30278-002A	FAN BRACKET		
69	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x2)	
70	GV30498-001A	REAR BRACKET		
71	QYSBSG3010Z	TAPPING SCREW	3mm x 10mm(x2)	
72	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x3)	
73	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm	
74	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm	
75	QYSBSGY3010E	SPECIAL SCREW	3mm x 10mm(x2)	
76	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x2)	
77	GV40121-004A	SPECER		
78	GV40121-006A	SPECER		
79	QYSBSG3010Z	TAPPING SCREW	3mm x 10mm(x2)	
80	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x2)	
81	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm	
82	GV10110-001A/S/	METAL COVER		
83	QYSDSG3006M	TAP SCREW	3mm x 6mm(x2)	
84	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x6)	
85	GV20203-001A	CD FITTING (1)		
86	GV20204-001A	CD FITTING (2)		
87	GV20205-001A	CD FITTING (3)		
88	GV20206-001A	CD FITTING (4)		
89	GV20207-001A	CD FITTING (5)		
90	GV30299-004A	SOUND MODE KNOB	(x2)	
91	GV30297-002A	VOLUME LENS		
92	QYSDSF2608Z	SCREW	2.6mm x 8mm(x2)	
93	GV30262-002A	VOLUME ORNAMENT		
94	GV30298-001A	VOLUME KNOB		
95	GV40186-001A	NUT		
⚠ 96	QQT0394-001	POWER TRANSF	T 001	
⚠ 97	QMPD380-200-JN	POWER CORD(US/CA)	2m BLACK	
98	QAR0246-001	FAN		
99	QUQH12-1109AJ	CARD WIRE		
100	QUQH12-0909BJ	CARD WIRE		
101	QUQH12-1019BJ	CARD WIRE		
102	QUQH10-1714AJ	CARD WIRE		
103	QUQH12-2118BJ	CARD WIRE		
104	QUQH12-1513AJ	CARD WIRE		
⚠ 105	QMF51U1-6R3-J8	FUSE	F 001 6.3A AC125V	
⚠ 106	QMF51U1-8R0-J8	FUSE	F 101 8A AC125V	
⚠ 107	QMF51U1-8R0-J8	FUSE	F 102 8A AC125V	
⚠ 108	QMF51U1-3R15-J8	FUSE	F 103 3.15A AC125V	
109	GV20212-002A	FL HOLDER		
110	E310243-002	PLASTIC RIVET	(x2)	

Speaker assembly and parts list

(SP-HXZ30)

Block No. M 2 M M

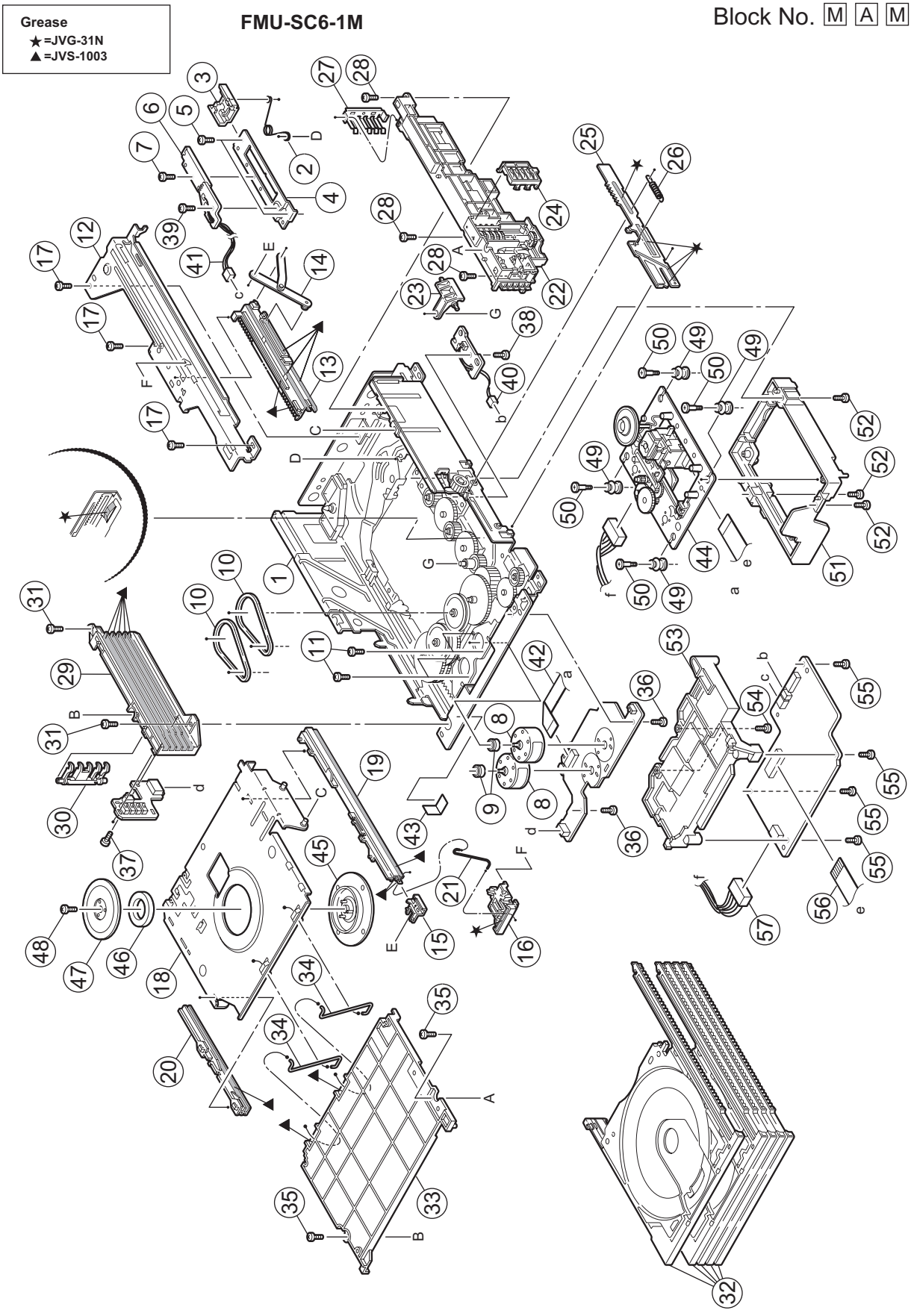


Speaker

Block No. [M][2][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	J200-XZ300LS-90	F.PANEL ASSY(L)		
1	J200-XZ300RS-90	F.PANEL ASSY(R)		
2	J221-XZ300LS-20	S.PANEL ASSY(L)		
2	J221-XZ300RS-20	S.PANEL ASSY(R)		
3	300-J0XZ301300	WF TOP	(x2)	
4	300-J1XZ301300	WF BOTTOM	(x2)	
5	300-J0XZ302000	SUB WOOFER	(x2)	
6	302-J0HXZ30500	TWEETER	(x2)	
7	411-B74545AB1	SCREW 4.5/45	(x8)	
8	411-B840120P1	SCREW	(x20)	
9	411-B84020AB1	SCREW	(x20)	
10	411-N54020AB1	SCREW	(x8)	
11	441-802103-00	LEG CUSHION	(x8)	
12	600-LXZ30J-00	SPEC LABEL-L		
12	600-RXZ30J-00	SPEC LABEL-R		

CD changer mechanism assembly and parts list



CD changer mechanism

Block No. [M][A][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	LV10743-001A	CHASSIS ASSY		
2	LV43278-001A	SENSOR SPRING		
3	LV33961-001A	SENSOR SLIDER		
4	LV33962-001A	SENSOR BRACKET		
5	QYSDST2605Z	SCREW	2.6mm x 5mm(x2)	
6	QVY0027-B14	S V RESISTOR		
7	QYSDST2004Z	SCREW	2mm x 4mm	
8	QAR0164-001	MOTOR	(x2)	
9	LV42340-001A	MOTOR PULLEY	(x2)	
10	LV41431-001A	BELT	(x2)	
11	QYSPSPU1725N	SCREW	1.7mm x 2.5mm(x4)	
12	LV10744-001A	RACK HOLDER		
13	LV21406-001A	LOADING RACK		
14	LV43279-001A	LIFT ARM ASSY		
15	LV33963-001A	HOOK		
16	LV33964-001A	HOOK STOPPER		
17	QYSDST2605Z	SCREW	2.6mm x 5mm(x3)	
18	LV33965-003A	LIFTER ASSY		
19	LV21408-001A	RAIL(R)		
20	LV21409-001A	RAIL(L)		
21	LV43285-001A	ROD (L)		
22	LV21520-001A	SIDE(R) ASSY		
23	LV33974-001A	SELECT LEVER		
24	LV33975-001A	GEAR COVER		
25	LV33976-001A	ELEVATOR CAM		
26	LV43287-001A	ELEVATOR SPRING		
27	LV33977-002A	CLICK SPRING		
28	QYSDST2605Z	SCREW	2.6mm x 5mm(x3)	
29	LV10749-001A	SIDE(L)		
30	LV33980-001A	OPEN DET.LEVER		
31	QYSDST2605Z	SCREW	2.6mm x 5mm(x2)	
32	LV10746-001A	TRAY ASSY	(x5)	
33	LV10750-001A	TOP COVER		
34	LV43289-001A	ROD	(x2)	
35	QYSDSF2608Z	SCREW	2.6mm x 8mm(x2)	
36	QYSDST2605Z	SCREW	2.6mm x 5mm(x2)	
37	QYSDSF2608Z	SCREW	2.6mm x 8mm	
38	QYSDST2605Z	SCREW	2.6mm x 5mm	
39	QYSDST2004Z	SCREW	2mm x 4mm	
40	WJM0330-001A	E-SI C WIRE C-F		
41	WJM0331-001A	E-SI C WIRE C-F		
42	QUQ110-1521BF	FFC WIRE		
43	VYSA1R4-056	SPECER		
44	----------	CD TRAMECHA ASS		
45	VKS3697-001	CLAMPER		
46	VYH7313-003	P.C.MAGNET		
47	LV33981-001A	CD YOKE		
48	QYSDSF2606Z	SCREW	2.6mm x 6mm	
49	LV41659-002A	INSULATOR	(x4)	
50	LV43245-001A	SPECIAL SCREW	(x4)	
51	LV21410-001A	CD TM BASE		
52	QYSDST2605Z	SCREW	2.6mm x 5mm(x3)	
53	LV21411-001A	CD MODULE BKT		
54	QYSDST2605Z	SCREW	2.6mm x 5mm(x2)	
55	QYSDSF2608Z	SCREW	2.6mm x 8mm(x4)	
56	QUQ610-1611AJ	FFC WIRE		
57	QJJ010-061802	SIN CR C-C WIRE		

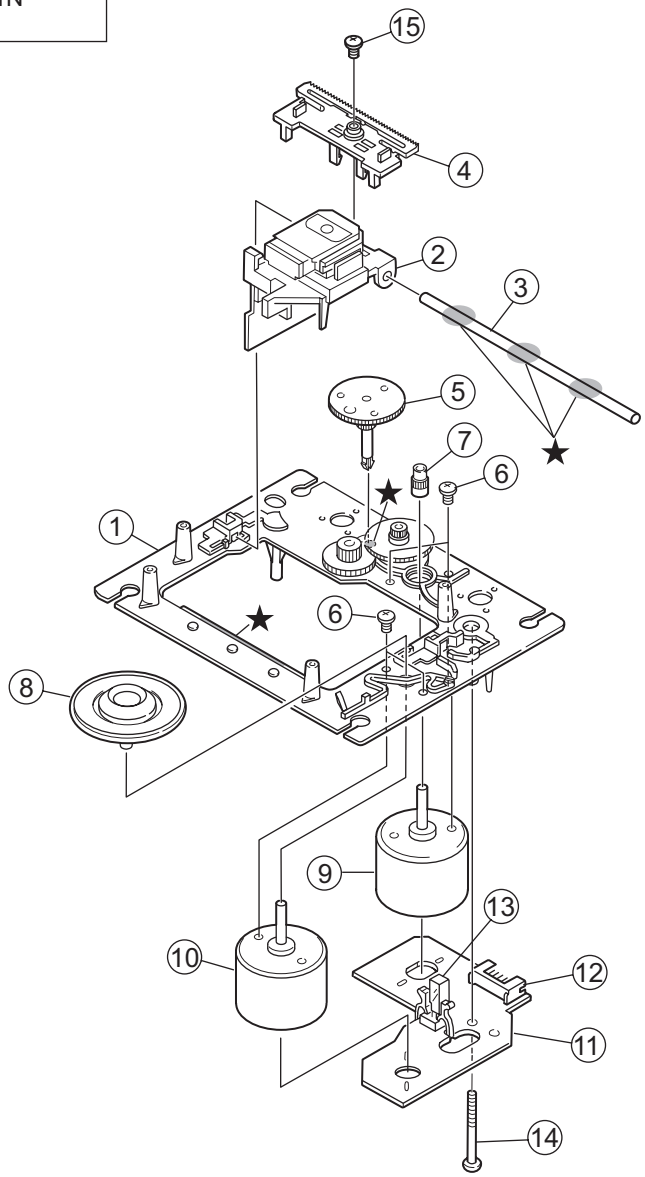
CD mechanism assembly and parts list

Block No. M B M M

FXL-M75T-1M

Grease & Bond

★ = JVG-31N



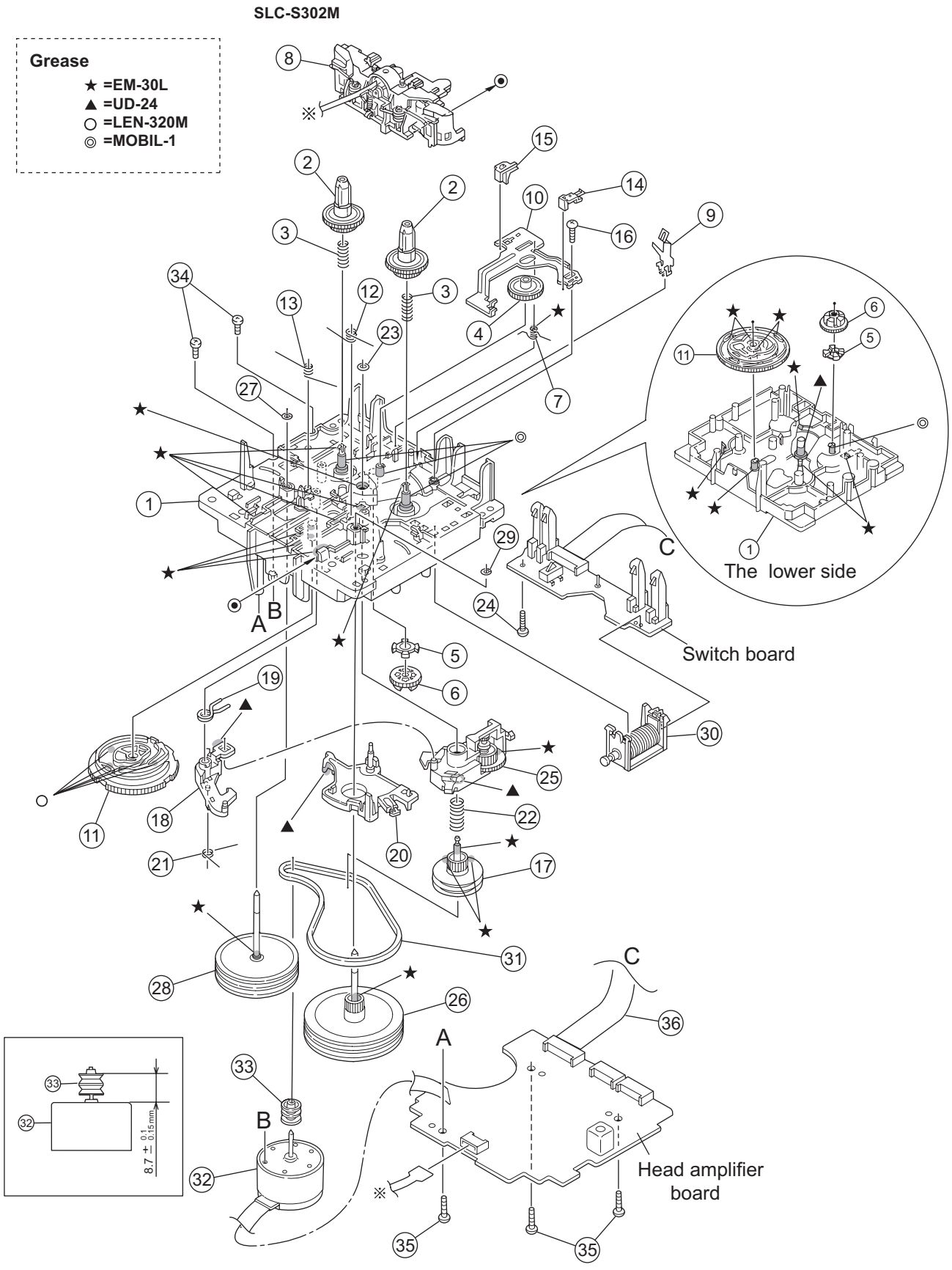
CD mechanism

Block No. [M][B][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	LV10723-001A	CD MECHA BASE A		
2	OPTIMA-73B1	C.D PICK		
3	E406777-002SM	C.D SHAFT		
4	LV31002-001A	CD RACK		
5	E307745-441SM	C.D GEAR 3		
6	QYSDSP2003N	SCREW	2mm x 3mm(x4)	
7	E406750-442SM	PINION		
8	LV42350-001A	T.T.ASSY		
9	QAR0253-001	FEED MOTOR		
10	QAR0276-001	SP MOTOR		
11	EMW10190-441	CIR BOARD		
12	QGA2001F1-06	CONNECTOR	W-B (1-6)	
13	QSW0506-001	LEAF SW		
14	E75832-221SS	SPECIAL SCREW		
15	QYSDSF2006Z	SCREW	2mm x 6mm	

Cassette mechanism assembly and parts list

Block No. M P M M



Cassette mechanism

Block No. [M][P][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	VKS1165-00L	CHASSIS B. ASSY		
2	VKS2274-002	REEL GEAR	(x2)	
3	VKW5286-002	B.T. SPRING	(x2)	
4	VKS5559-001	PLAY IDLE GEAR		
5	VKS5595-002	BLIND		
6	VKS5560-003	FR IDLE GEAR		
7	LV42013-001A	EARTH SPRING		
8	SLC-RP4SVM	HEAD MOUNT ASSY		
9	VKY3149-002	CASSETTE SP.		
10	LV31786-001A	PLAY LEVER		
11	VKS1166-004	CONTROL CAM		
12	VKW5279-002	HEAD BASE SP(R)		
13	VKW5280-001	HEAD BASE SP(L)		
14	LV41584-001A	BRAKE(R)		
15	LV41585-003A	BRAKE(L)		
16	QYSBSF2005Z	SCREW	2mm x 5mm	
17	VKS5603-00G	MAIN PULLEY ASS		
18	VKS3785-001MM	FR ARM		
19	VKW5284-002	SWING SPRING		
20	VKS2278-003	TRIGGER ARM		
21	VKW5301-001	FR SPRING		
22	VKW5266-001	ELEVATOR SPRING		
23	WDL214025	WASHER		
24	QYSBSF2005Z	SCREW	2mm x 5mm	
25	VKS3786-00G	CLUTCH ASSY		
26	VKF3205-00B	F.WHEEL ASSY(R)		
27	WDL183425	SLIT WASHER		
28	VKF3207-00C	F.WHEEL ASSY(L)		
29	WDL173525-6	SLIT WASHER		
30	VKZ3174-00B	DC SOLENOID		
31	LV42836-001A	CAPSTAN BELT		
32	MSI-5U2LWA	D.C.MOTOR		
33	VKR4761-003	MOTOR PULLEY		
34	QYSPSP2604Z	SCREW	2.6mm x 4mm(x2)	
35	QYSBSF2608Z	TAP SCREW	2.6mm x 8mm(x3)	
36	QUQH12-0906BF	WIRE		

Electrical parts list

Power board

Block No. [0][1][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC303	KIA7808API	IC	Regulator	
IC304	KIA7805API	IC	Regulator	
IC305	KIA7809API	IC	Regulator	
IC360	KIA7805API	IC	Regulator	
IC701	STK412-420	POWER I.C		
Q701	KTC3200/GL/-T	TRANSISTOR		
Q702	KTC3200/GL/-T	TRANSISTOR		
Q710	KTA1023/OY/-T	TRANSISTOR		
Q711	KTC3200/GL/-T	TRANSISTOR		
Q712	KTA1268/GL/-T	TRANSISTOR		
Q713	KTC1027/OY/-T	TRANSISTOR		
Q725	KTA1268/GL/-T	TRANSISTOR		
Q726	2SC2389S/SE/-T	TRANSISTOR		
Q727	KTA1268/GL/-T	TRANSISTOR		
Q728	2SC2785/FE/-T	TRANSISTOR		
⚠ D233	2A02-M	DIODE		
⚠ D234	2A02-M	DIODE		
⚠ D235	2A02-M	DIODE		
⚠ D236	2A02-M	DIODE		
D304	1SS119-041-T2	DIODE		
D305	MTZJ8.2C-T2	Z DIODE		
D313	MTZJ10C-T2	Z DIODE		
D315	MTZJ11B-T2	Z DIODE		
D360	1SS119-041-T2	DIODE		
D362	MTZJ8.2C-T2	Z DIODE		
D703	MTZJ15B-T2	Z DIODE		
D704	MTZJ15B-T2	Z DIODE		
D719	1SS119-041-T2	DIODE		
D720	1SS119-041-T2	DIODE		
D723	MTZJ36B-T2	Z DIODE		
D724	MTZJ36B-T2	Z DIODE		
D726	1SS119-041-T2	DIODE		
D728	1SS119-041-T2	DIODE		
C302	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C304	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C305	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C307	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C308	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C311	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C312	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C362	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C703	QCBB1HK-471Y	C CAPACITOR	470pF 50V K	
C705	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C706	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C707	QETN1JM-476Z	E CAPACITOR	47uF 63V M	
C708	QETN1JM-476Z	E CAPACITOR	47uF 63V M	
C709	QCSB1HK-4R7Y	C CAPACITOR	4.7pF 50V K	
C710	QCSB1HK-4R7Y	C CAPACITOR	4.7pF 50V K	
C711	QFZ0212-104Z	M CAPACITOR	0.1uF	
C712	QFZ0212-104Z	M CAPACITOR	0.1uF	
C713	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C714	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C715	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C716	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C721	QETN1CM-476Z	E CAPACITOR	47uF 16V M	
C722	QETN1CM-476Z	E CAPACITOR	47uF 16V M	
C723	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C726	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C729	QETN1CM-476Z	E CAPACITOR	47uF 16V M	
C730	FQCF31HZ-223Z	D.CAPACITOR		
C731	FQCF31HZ-223Z	D.CAPACITOR		
C738	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C739	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
R301	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
⚠ R303	QRJ146J-4R7X	UNF C RESISTOR	4.7Ω 1/4W J	
⚠ R305	QRJ146J-2R2X	UNF C RESISTOR	2.2Ω 1/4W J	
⚠ R307	QRJ146J-1R0X	UNF C RESISTOR	1Ω 1/4W J	
R362	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
⚠ R701	QRJ146J-470X	UNF C RESISTOR	47Ω 1/4W J	
⚠ R702	QRJ146J-470X	UNF C RESISTOR	47Ω 1/4W J	
R703	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R704	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
⚠ R705	FQRJ143J-821X	UNF C RESISTOR		
⚠ R706	FQRJ143J-821X	UNF C RESISTOR		
R707	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R708	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
⚠ R713	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
⚠ R714	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
⚠ R715	FQRJ143J-100X	UNF C RESISTOR		
⚠ R716	FQRJ143J-100X	UNF C RESISTOR		
R717	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R718	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R719	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J	
R720	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J	
R721	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R722	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R723	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R724	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R727	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R728	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R729	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R730	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R734	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R739	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J	
R740	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R741	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R742	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R744	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R753	QRZ0224-R22	EMIT RESISTOR	0.22Ω	
R754	QRZ0224-R22	EMIT RESISTOR	0.22Ω	
R761	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R762	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R766	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
R768	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R769	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
⚠ R774	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
R775	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R777	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R778	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R786	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R787	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
⚠ R1001	QRZ9037-335	COMP RESISTOR	3.3MΩ 1/2W K	
⚠ R1002	ERX12SJR33E	UNF C RESISTOR		
L701	QQLZ035-R39	COIL	0.39uH	
L702	QQLZ035-R39	COIL	0.39uH	
CN212	QGD2504C1-03Z	CONNECTOR	(1-3)	
CN213	QGD2504C1-04Z	CONNECTOR	(1-4)	
CN214	QGA3901C1-05	CONNECTOR	W-B (1-5)	
CN215	QGB2510K2-15	CONNECTOR	B-B (1-15)	
CN233	QGD2504C1-04Z	CONNECTOR	(1-4)	
CN250	QGA7901F2-02	CONNECTOR	W-B (1-2)	
CN301	QGB2510K2-13	CONNECTOR	B-B (1-13)	
FT111	QNG0003-001Z	FUSE CLIP		
FT112	QNG0003-001Z	FUSE CLIP		
FT511	QNG0003-001Z	FUSE CLIP		
FT512	QNG0003-001Z	FUSE CLIP		
FT521	QNG0003-001Z	FUSE CLIP		
FT522	QNG0003-001Z	FUSE CLIP		
FT531	QNG0003-001Z	FUSE CLIP		
FT532	QNG0003-001Z	FUSE CLIP		
TW215	QUB350-09HPHP	FLAT WIRE		

Input board

Block No. [0][2][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC240	KIA7812API	IC	Regulator	
IC415	BA033T	REGULATOR IC	Regurator	
IC425	M61519FP	VOLUME IC	Audio signal proccessor with surround	
IC466	HA17558A	IC	Dual Operational Amp	
IC467	HA17558A	IC	Dual Operational Amp	
IC491	HA17558A	IC	Dual Operational Amp	
IC492	HA17558A	IC	Dual Operational Amp	
IC602	STK432-070	IC	2ch AF power amp	
Q201	KTC2026/Y/	TRANSISTOR		
Q202	2SC2785/FE/-T	TRANSISTOR		
Q260	KTC3203/OY/-T	TRANSISTOR		
Q415	KRC104M-T	TRANSISTOR		
Q416	KRC102M-T	DIGI TRANSISTOR		
Q486	2SC2785/FE/-T	TRANSISTOR		
Q487	2SC2785/FE/-T	TRANSISTOR		
Q491	2SC2785/FE/-T	TRANSISTOR		
Q492	2SC2785/FE/-T	TRANSISTOR		
Q493	2SC2785/FE/-T	TRANSISTOR		
Q513	2SC3576-JVC-T	TRANSISTOR		
Q514	2SC3576-JVC-T	TRANSISTOR		
Q515	2SC3576-JVC-T	TRANSISTOR		
Q516	2SC3576-JVC-T	TRANSISTOR		
Q517	2SC3576-JVC-T	TRANSISTOR		
Q518	KRA102M-T	DIGI TRANSISTOR		
Q530	2SC2785/FE/-T	TRANSISTOR		
Q531	KRC111M-T	TRANSISTOR		
Q601	KTC3200/GL/-T	TRANSISTOR		
Q602	KTC3200/GL/-T	TRANSISTOR		
Q612	2SA1175/FE/-T	TRANSISTOR		
Q613	KRC102M-T	DIGI TRANSISTOR		
Q682	KTC3203/OY/-T	TRANSISTOR		
Q690	2SC2785/FE/-T	TRANSISTOR		
Q733	2SC3576-JVC-T	TRANSISTOR		
Q734	2SC3576-JVC-T	TRANSISTOR		
Q735	2SC3576-JVC-T	TRANSISTOR		
Q736	2SC3576-JVC-T	TRANSISTOR		
Q737	KRA111M-T	DIGI TRANSISTOR		
⚠ D201	1N5402M-20	DIODE		
⚠ D202	1N5402M-20	DIODE		
⚠ D203	1N5402M-20	DIODE		
⚠ D204	1N5402M-20	DIODE		
⚠ D211	1N5402M-20	DIODE		
⚠ D212	1N5402M-20	DIODE		
⚠ D213	1N5402M-20	DIODE		
⚠ D214	1N5402M-20	DIODE		
D219	MTZJ20B-T2	Z DIODE		
D220	MTZJ6.8B-T2	Z DIODE		
D221	1SS119-041-T2	DIODE		
D222	MTZJ18B-T2	Z DIODE		
D240	MTZJ13B-T2	Z DIODE		
D260	1SS119-041-T2	DIODE		
D261	1SS119-041-T2	DIODE		
D262	1SS119-041-T2	DIODE		
D263	1SS119-041-T2	DIODE		
D264	MTZJ5.1B-T2	Z DIODE		
D265	1SS119-041-T2	DIODE		
D266	1SS119-041-T2	DIODE		
D411	1SS119-041-T2	DIODE		
D412	1SS119-041-T2	DIODE		
D415	MTZJ3.9B-T2	Z DIODE		
D425	1SS119-041-T2	DIODE		
D466	1SS119-041-T2	DIODE		
D467	1SS119-041-T2	DIODE		
D486	1SS119-041-T2	DIODE		
D491	1SS119-041-T2	DIODE		
D492	1SS119-041-T2	DIODE		
D513	MTZJ3.9B-T2	Z DIODE		
D514	MTZJ3.9B-T2	Z DIODE		
D530	1SS119-041-T2	DIODE		
D619	1SS119-041-T2	DIODE		
D620	1SS119-041-T2	DIODE		
D622	MTZJ9.1B-T2	Z DIODE		
D650	1SS119-041-T2	DIODE		
D725	1SS119-041-T2	DIODE		
C201	QFKC2EK-103Z	MM CAPACITOR	0.01uF 250V K	
C202	QFKC2EK-103Z	MM CAPACITOR	0.01uF 250V K	
C203	QCE22HP-103	C CAPACITOR	0.01uF 500V P	
C204	QEZ0613-478	E CAPACITOR	4700uF	
C205	QEZ0613-478	E CAPACITOR	4700uF	
C211	QFLC2AJ-103Z	M CAPACITOR	0.01uF 100V J	
C212	QFLC2AJ-103Z	M CAPACITOR	0.01uF 100V J	
C213	QFKC2EK-104Z	MM CAPACITOR	0.1uF 250V K	
C214	QETM1HM-228	E CAPACITOR	2200uF 50V M	
C215	QETM1HM-228	E CAPACITOR	2200uF 50V M	
C217	QETN1JM-107Z	E CAPACITOR	100uF 63V M	
C218	QETN1HM-226Z	E CAPACITOR	22uF 50V M	
C219	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C220	QETN1HM-226Z	E CAPACITOR	22uF 50V M	
C222	QETN1EM-106Z	E CAPACITOR	10uF 25V M	
C236	QETM1EM-688	E CAPACITOR	6800uF 25V M	
C240	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C241	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C260	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C401	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C402	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C403	FQCF31HP-223Z	M CAPACITOR		
C404	FQCF31HP-103Z	D.CAPACITOR		
C408	FQCF31HP-103Z	D.CAPACITOR		
C409	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
C410	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
C411	QCBB1HK-222Y	C CAPACITOR	2200pF 50V K	
C415	QETN1AM-227Z	E CAPACITOR	220uF 10V M	
C417	QFLC1HJ-103Z	M CAPACITOR	0.01uF 50V J	
C418	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C419	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C420	QFLC1HJ-103Z	M CAPACITOR	0.01uF 50V J	
C422	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C423	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C425	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C426	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C427	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C428	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C429	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C430	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C431	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C432	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C433	QETN1EM-106Z	E CAPACITOR	10uF 25V M	
C434	QETN1EM-106Z	E CAPACITOR	10uF 25V M	
C436	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
C437	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C438	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
C440	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C441	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
C442	QFLC1HJ-472Z	M CAPACITOR	4700pF 50V J	
C443	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C444	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C445	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
C446	QFLC1HJ-153Z	M CAPACITOR	0.015uF 50V J	
C447	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C448	QFLC1HJ-153Z	M CAPACITOR	0.015uF 50V J	
C449	QFLC1HJ-472Z	M CAPACITOR	4700pF 50V J	
C450	QETN1AM-477Z	E CAPACITOR	470uF 10V M	
C451	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C452	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C453	QFLC1HJ-153Z	M CAPACITOR	0.015uF 50V J	
C455	QFLC1HJ-153Z	M CAPACITOR	0.015uF 50V J	
C456	QDGB1HK-681Y	C CAPACITOR	680pF 50V K	
C457	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C458	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C463	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C464	QETN1AM-477Z	E CAPACITOR	470uF 10V M	
C465	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C466	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C467	QFLC1HJ-153Z	M CAPACITOR	0.015uF 50V J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C468	QFLC1HJ-822Z	M CAPACITOR	8200pF 50V J	
C469	QFVJ1HJ-274Z	MF CAPACITOR	0.27uF 50V J	
C470	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C471	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C472	QFVJ1HJ-224Z	MF CAPACITOR	0.22uF 50V J	
C473	QFLC1HJ-273Z	M CAPACITOR	0.027uF 50V J	
C474	QFLC1HJ-222Z	M CAPACITOR	2200pF 50V J	
C486	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C487	QDGB1HK-681Y	C CAPACITOR	680pF 50V K	
C488	QDXB1CM-182Y	C CAPACITOR	1800pF 16V M	
C489	QCSB1HJ-330Y	C CAPACITOR	33pF 50V J	
C490	QFLC1HJ-153Z	M CAPACITOR	0.015uF 50V J	
C491	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C492	QETN1CM-476Z	E CAPACITOR	47uF 16V M	
C493	QETN1CM-476Z	E CAPACITOR	47uF 16V M	
C494	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C495	QETN1HM-476Z	E CAPACITOR	47uF 50V M	
C496	QETN1JM-476Z	E CAPACITOR	47uF 63V M	
C497	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C498	QETN1CM-227Z	E CAPACITOR	220uF 16V M	
C499	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C500	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C501	QETN1CM-476Z	E CAPACITOR	47uF 16V M	
C502	QFLC1HJ-333Z	M CAPACITOR	0.033uF 50V J	
C503	QFLC1HJ-823Z	M CAPACITOR	0.082uF 50V J	
C504	QETN1CM-476Z	E CAPACITOR	47uF 16V M	
C513	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C530	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C531	QCSB1HJ-330Y	C CAPACITOR	33pF 50V J	
C532	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C533	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
C601	FQCF31HZ-223Z	D.CAPACITOR		
C602	FQCF31HZ-223Z	D.CAPACITOR		
C603	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C604	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C605	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C606	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C607	QETN1JM-476Z	E CAPACITOR	47uF 63V M	
C608	QETN1JM-476Z	E CAPACITOR	47uF 63V M	
C609	QCSB1HJ-100Y	C CAPACITOR	10pF 50V J	
C610	QCSB1HJ-100Y	C CAPACITOR	10pF 50V J	
C611	QETN1HM-476Z	E CAPACITOR	47uF 50V M	
C612	QETN1HM-476Z	E CAPACITOR	47uF 50V M	
C613	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C614	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C615	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C616	QFLC1HJ-473Z	M CAPACITOR	0.047uF 50V J	
C621	QTE1V06-106Z	E CAPACITOR	10uF 35V	
C622	QTE1V06-106Z	E CAPACITOR	10uF 35V	
C623	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C624	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
C639	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
⚠ R202	QRJ146J-470X	UNF C RESISTOR	47Ω 1/4W J	
R203	QRE141J-752Y	C RESISTOR	7.5kΩ 1/4W J	
R204	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R215	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R216	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R217	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R218	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
⚠ R240	QRZ9005-100X	FUSI RESISTOR	10Ω	
R260	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R261	QRE141J-202Y	C RESISTOR	2kΩ 1/4W J	
R262	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R263	QRE141J-202Y	C RESISTOR	2kΩ 1/4W J	
R265	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R401	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R402	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R403	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R404	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R408	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R409	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R411	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J	
R412	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J	
R413	QRE141J-623Y	C RESISTOR	62kΩ 1/4W J	
R414	QRE141J-623Y	C RESISTOR	62kΩ 1/4W J	
R415	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R416	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R417	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R418	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R419	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J	
R420	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J	
R421	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R422	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R423	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R424	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R425	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R429	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R430	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R431	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R432	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R433	QRE141J-513Y	C RESISTOR	51kΩ 1/4W J	
R434	QRE141J-513Y	C RESISTOR	51kΩ 1/4W J	
R435	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R436	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R437	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R438	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R439	QRE141J-203Y	C RESISTOR	20kΩ 1/4W J	
R440	QRE141J-203Y	C RESISTOR	20kΩ 1/4W J	
R441	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R442	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R443	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R444	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R466	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R467	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R468	QRE141J-433Y	C RESISTOR	43kΩ 1/4W J	
R469	QRE141J-433Y	C RESISTOR	43kΩ 1/4W J	
R470	QRE141J-274Y	C RESISTOR	270kΩ 1/4W J	
R471	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R472	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R473	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R474	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R475	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R476	QRE141J-114Y	C RESISTOR	110kΩ 1/4W J	
R477	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R478	QRE141J-132Y	C RESISTOR	1.3kΩ 1/4W J	
R479	QRE141J-822Y	C RESISTOR	8.2kΩ 1/4W J	
R480	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J	
R481	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R486	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R487	QRE141J-220Y	C RESISTOR	22Ω 1/4W J	
R488	QRE141J-225Y	C RESISTOR	2.2MΩ 1/4W J	
R489	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R491	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R492	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R493	QRE141J-224Y	C RESISTOR	220kΩ 1/4W J	
R494	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R495	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R496	QRE141J-184Y	C RESISTOR	180kΩ 1/4W J	
R497	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R498	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R499	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R500	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R501	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R502	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R503	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R504	QRE141J-271Y	C RESISTOR	270Ω 1/4W J	
R505	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R506	QRE141J-822Y	C RESISTOR	8.2kΩ 1/4W J	
R507	QRE141J-113Y	C RESISTOR	11kΩ 1/4W J	
R508	QRE141J-362Y	C RESISTOR	3.6kΩ 1/4W J	
R509	QRE141J-124Y	C RESISTOR	120kΩ 1/4W J	
R510	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R511	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R512	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R513	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R514	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R515	QRE141J-512Y	C RESISTOR	5.1kΩ 1/4W J	
R516	QRE141J-272Y	C RESISTOR	2.7kΩ 1/4W J	
R517	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R518	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R519	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R520	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R521	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R530	QRE141J-225Y	C RESISTOR	2.2MΩ 1/4W J	
R531	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R532	QRE141J-682Y	C RESISTOR	6.8kΩ 1/4W J	
R533	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R534	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R535	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
⚠ R601	QRJ146J-101X	UNF C RESISTOR	100Ω 1/4W J	
⚠ R602	QRJ146J-101X	UNF C RESISTOR	100Ω 1/4W J	
R603	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R604	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
⚠ R605	FQRJ143J-122X	UNF C RESISTOR		
⚠ R606	FQRJ143J-122X	UNF C RESISTOR		
R607	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
R608	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
⚠ R613	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
⚠ R614	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
⚠ R615	FQRJ143J-100X	UNF C RESISTOR		
⚠ R616	FQRJ143J-100X	UNF C RESISTOR		
R617	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R618	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R619	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R620	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R621	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R623	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R637	QRK126J-331X	UNF C RESISTOR	330Ω 1/2W J	
⚠ R638	QRK126J-331X	UNF C RESISTOR	330Ω 1/2W J	
⚠ R639	QRL01DJ-821X	OMF RESISTOR	820Ω 1W J	
⚠ R640	QRL01DJ-821X	OMF RESISTOR	820Ω 1W J	
R641	QRK126J-331X	UNF C RESISTOR	330Ω 1/2W J	
⚠ R642	QRL01DJ-821X	OMF RESISTOR	820Ω 1W J	
⚠ R643	QRL01DJ-821X	OMF RESISTOR	820Ω 1W J	
⚠ R652	QRT01DJ-R22X	MF RESISTOR	0.22Ω 1W J	
⚠ R653	QRT01DJ-R22X	MF RESISTOR	0.22Ω 1W J	
⚠ R654	QRT01DJ-R22X	MF RESISTOR	0.22Ω 1W J	
⚠ R655	QRT01DJ-R22X	MF RESISTOR	0.22Ω 1W J	
R666	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
R667	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R668	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
⚠ R674	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
R675	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R676	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R680	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R682	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R683	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R725	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J	
R726	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R733	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R734	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R735	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R736	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
⚠ R737	QRK126J-331X	UNF C RESISTOR	330Ω 1/2W J	
⚠ R738	QRK126J-331X	UNF C RESISTOR	330Ω 1/2W J	
⚠ R743	QRK126J-331X	UNF C RESISTOR	330Ω 1/2W J	
L411	QQR1183-001Z	FERRITE BEADS		
L601	QQLZ035-R39	COIL	0.39uH	
L602	QQLZ035-R39	COIL	0.39uH	
L703	QQL231K-470Y	COIL	47uH K	
CN11	QGF1205F1-11	CONNECTOR	FFC/FPC (1-11)	
CN44	QGF1201F3-10	CONNECTOR	FFC/FPC (1-10)	
CN205	QGB2510J1-15	CONNECTOR	B-B (1-15)	
CN206	QGA2501F1-02	CONNECTOR	W-B (1-2)	
CN207	QGB2510K2-06	CONNECTOR	B-B (1-6)	
CN217	QGB2510J1-06	CONNECTOR	B-B (1-6)	
CN311	QGB2510J1-13	CONNECTOR	B-B (1-13)	
CN661	QGF1036F1-17	CONNECTOR	FFC/FPC (1-17)	
CN701	QGD2503F1-04	CONNECTOR	(1-4)	
CN870	QGF1205F1-21	CONNECTOR	FFC/FPC (1-21)	
FW202	QUM157-07DGZ4	FW CABLE		
FW204	QJK015-050604	WIRE SOCKET		
J81	QNB0170-002	SPK.TERMINAL		
J411	QNN0420-001	PIN JACK		
RY1	QSK0109-001	RELAY		
RY2	QSK0109-001	RELAY		
SP425	GV40205-001A	IC HOLDER		
TW409	QUB230-06HPHP	WIRE ASSY		
TW684	QUB070-08PPPP	WIRE		

Front board

Block No. [0][3][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC810	UPD784215AGF535	IC		
IC951	GP1UM271XK	IR DETECT UNIT	IR detecting unit for remote control	
Q821	KRC102M-T	DIGI TRANSISTOR		
Q822	KRC102M-T	DIGI TRANSISTOR		
Q823	KRC102M-T	DIGI TRANSISTOR		
Q824	KRC102M-T	DIGI TRANSISTOR		
Q825	KRC102M-T	DIGI TRANSISTOR		
Q826	KRC102M-T	DIGI TRANSISTOR		
Q827	KRC102M-T	DIGI TRANSISTOR		
Q828	KRC102M-T	DIGI TRANSISTOR		
Q829	KRC102M-T	DIGI TRANSISTOR		
Q830	KRC102M-T	DIGI TRANSISTOR		
Q833	KRA111M-T	DIGI TRANSISTOR		
Q834	KRC102M-T	DIGI TRANSISTOR		
Q835	KRC102M-T	DIGI TRANSISTOR		
Q836	KRC102M-T	DIGI TRANSISTOR		
Q837	KRC102M-T	DIGI TRANSISTOR		
Q838	KRC102M-T	DIGI TRANSISTOR		
Q875	KRC102M-T	DIGI TRANSISTOR		
Q916	KTA1267/YG/-T	TRANSISTOR		
Q917	KRC102M-T	DIGI TRANSISTOR		
Q930	KRA102M-T	DIGI TRANSISTOR		
Q932	KRA102M-T	DIGI TRANSISTOR		
Q934	KRA102M-T	DIGI TRANSISTOR		
Q936	KRA102M-T	DIGI TRANSISTOR		
Q980	KRC102M-T	DIGI TRANSISTOR		
D801	1SS119-041-T2	DIODE		
D803	1SS119-041-T2	DIODE		
D804	1SS119-041-T2	DIODE		
D807	1SS119-041-T2	DIODE		
D808	1SS119-041-T2	DIODE		
D821	SLA-362LT-T	LED		
D822	SLA-362LT-T	LED		
D823	SLA-362LT-T	LED		
D824	SLA-362LT-T	LED		
D825	SLA-362LT-T	LED		
D826	SLA-362LT-T	LED		
D827	SLA-362LT-T	LED		
D828	SLA-362LT-T	LED		
D829	SLA-362LT-T	LED		
D830	SLA-362LT-T	LED		
D833	MTZJ4.3B-T2	Z DIODE		
D834	SLA-362LT-T	LED		
D835	SLA-362LT-T	LED		
D836	SLA-362LT-T	LED		
D837	SLA-362LT-T	LED		
D838	SLA-362LT-T	LED		
D901	SMLU12E16W-P-T	LED		
D902	SMLU12E16W-P-T	LED		
D962	SLR-342VC-T	LED		
D972	SLI-570UT3F	LED		
D980	MTZJ5.1B-T2	Z DIODE		
D981	1SS119-041-T2	DIODE		
D982	1SS119-041-T2	DIODE		
D983	1SS119-041-T2	DIODE		
D1003	MTZJ2.4B-T2	Z DIODE		
C801	QCFB1HZ-105Y	C CAPACITOR	1uF 50V Z	
C803	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C804	QETN0JM-227Z	E CAPACITOR	220uF 6.3V M	
C806	QEKC1HM-105Z	E CAPACITOR	1uF 50V M	
C807	QEKC1HM-105Z	E CAPACITOR	1uF 50V M	
C808	QCSB1HJ-270Y	C CAPACITOR	27pF 50V J	
C809	QCSB1HJ-300Y	C CAPACITOR	30pF 50V J	
C810	QEKC1HM-106Z	E CAPACITOR	10uF 50V M	
C811	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C812	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C813	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C814	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C818	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C819	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C820	QCFB1HZ-105Y	C CAPACITOR	1uF 50V Z	
C821	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C831	QDVB1EZ-223Y	C CAPACITOR	0.022uF 25V Z	
C832	QDVB1EZ-223Y	C CAPACITOR	0.022uF 25V Z	
C833	QCFB1HZ-105Y	C CAPACITOR	1uF 50V Z	
C835	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
C836	QEKC1EM-106Z	E CAPACITOR	10uF 25V M	
C840	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C889	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C900	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C901	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C902	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C903	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C958	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C959	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C960	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C961	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C962	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C963	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C980	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C1003	QDXB1CM-222Y	C CAPACITOR	2200pF 16V M	
C1004	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
C1005	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
C1006	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
R801	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R802	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R805	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R806	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R807	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R808	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R809	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R810	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R811	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R813	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R814	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R815	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R816	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R817	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R818	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R819	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R820	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R821	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R822	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R823	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R824	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R825	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R826	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R827	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R828	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R829	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R830	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R833	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R834	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R835	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R836	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R837	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R838	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R839	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R840	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R841	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R842	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R844	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R845	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R847	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R848	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R849	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R850	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R851	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R856	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R857	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R858	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R859	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R860	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R861	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R866	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R867	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R868	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R869	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R871	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R873	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R876	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R877	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R878	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R879	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R880	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R881	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R882	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R883	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R884	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R885	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R887	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R888	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R889	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R896	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R900	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R901	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R902	QRE141J-121Y	C RESISTOR	120Ω 1/4W J	
R903	QRE141J-151Y	C RESISTOR	150Ω 1/4W J	
R904	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R905	QRE141J-271Y	C RESISTOR	270Ω 1/4W J	
R906	QRE141J-391Y	C RESISTOR	390Ω 1/4W J	
R907	QRE141J-561Y	C RESISTOR	560Ω 1/4W J	
R908	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R909	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J	
R916	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R917	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R918	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R919	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R920	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R921	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R922	QRE141J-121Y	C RESISTOR	120Ω 1/4W J	
R923	QRE141J-151Y	C RESISTOR	150Ω 1/4W J	
R924	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R925	QRE141J-271Y	C RESISTOR	270Ω 1/4W J	
R926	QRE141J-391Y	C RESISTOR	390Ω 1/4W J	
R927	QRE141J-302Y	C RESISTOR	3kΩ 1/4W J	
R928	QRE141J-361Y	C RESISTOR	360Ω 1/4W J	
R930	QRE141J-181Y	C RESISTOR	180Ω 1/4W J	
R932	QRE141J-271Y	C RESISTOR	270Ω 1/4W J	
R933	QRE141J-271Y	C RESISTOR	270Ω 1/4W J	
R934	QRE141J-271Y	C RESISTOR	270Ω 1/4W J	
R935	QRE141J-271Y	C RESISTOR	270Ω 1/4W J	
R936	QRE141J-181Y	C RESISTOR	180Ω 1/4W J	
R938	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R940	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R941	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R942	QRE141J-121Y	C RESISTOR	120Ω 1/4W J	
R943	QRE141J-151Y	C RESISTOR	150Ω 1/4W J	
R944	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R945	QRE141J-271Y	C RESISTOR	270Ω 1/4W J	
R946	QRE141J-391Y	C RESISTOR	390Ω 1/4W J	
R947	QRE141J-561Y	C RESISTOR	560Ω 1/4W J	
R948	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R949	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J	
R950	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J	
R959	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R960	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R961	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R968	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R970	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R971	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R972	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R973	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R974	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R980	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R981	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R982	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R983	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R998	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R999	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
L803	QQL29BJ-100Z	COIL	10uH J	
L805	QQR1183-001Z	FERRITE BEADS		
L806	QQR1183-001Z	FERRITE BEADS		
L1001	QQL231K-2R2Y	COIL	2.2uH K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
L1002	QQL231K-2R2Y	COIL	2.2uH K	
L1003	QQR1277-001Z	COIL		
BZ801	QAN0055-001	BUZZER		
CN43	QGF1210G1-09	CONNECTOR	FFC/FPC (1-9)	
CN840	QGF1210G1-15	CONNECTOR	FFC/FPC (1-15)	
CN850	QGF1205F1-15	CONNECTOR	FFC/FPC (1-15)	
CN860	QGF1205C1-21	CONNECTOR	FFC/FPC (1-21)	
CN880	QGD2503F1-06	CONNECTOR	(1-6)	
CN900	QGD2503F1-05	CONNECTOR	(1-5)	
FL801	QLF0111-001	FL TUBE		
FW221	QUM154-15DGZ4	FLAT WIRE		
FW711	QUM154-33DGZ4	FLAT WIRE		
FW800	QUM024-20Z4Z4	FLAT WIRE		
FW890	QUM026-10DGZ4	FLAT WIRE		
FW900	QUM023-10Z4Z4	WIRE		
FW910	QUM025-10DGZ4	FLAT WIRE		
FW920	QUM023-10Z4Z4	WIRE		
FW950	QUM023-13Z4Z4	FLAT WIRE		
J1001	QNS0204-001	PHONE JACK		
JS958	QSW0862-001	ROTARY VR		
JS960	QSW0983-001	ROTARY SW		
JS962	QSW0983-001	ROTARY SW		
S900	QSW0825-001Z	TACT SW		
S901	QSW0825-001Z	TACT SW		
S902	QSW0825-001Z	TACT SW		
S903	QSW0825-001Z	TACT SW		
S904	QSW0825-001Z	TACT SW		
S905	QSW0825-001Z	TACT SW		
S906	QSW0825-001Z	TACT SW		
S907	QSW0825-001Z	TACT SW		
S908	QSW0825-001Z	TACT SW		
S909	QSW0825-001Z	TACT SW		
S910	QSW0825-001Z	TACT SW		
S920	QSW0825-001Z	TACT SW		
S921	QSW0825-001Z	TACT SW		
S922	QSW0825-001Z	TACT SW		
S923	QSW0674-001Z	TACT SW		
S924	QSW0674-001Z	TACT SW		
S925	QSW0674-001Z	TACT SW		
S926	QSW0674-001Z	TACT SW		
S940	QSW0674-001Z	TACT SW		
S941	QSW0825-001Z	TACT SW		
S942	QSW0825-001Z	TACT SW		
S943	QSW0825-001Z	TACT SW		
S944	QSW0825-001Z	TACT SW		
S945	QSW0825-001Z	TACT SW		
S946	QSW0825-001Z	TACT SW		
S947	QSW0825-001Z	TACT SW		
S948	QSW0825-001Z	TACT SW		
S949	QSW0825-001Z	TACT SW		
S950	QSW0674-001Z	TACT SW		
SP810	VYH7653-001	IC HOLDER		
SP889	VYSA1R3-049	SPECER		
TW801	QUB220-09HPDT	SINGLE WIRE		
TW889	QUB230-07A5A5	WIRE		
X801	QAX0724-001Z	CRYSTAL	12.000000MHz	

CD servo board

Block No. [0][4][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC201	BR24C08FV-X	IC		
IC251	MN101C61GMB1	IC		
IC601	AN22002A-W	I.C		
IC651	MN6627911AC1	IC		
IC671	A42L2604V-45L	IC		
IC681	TC7SH32FU-X	IC		
IC682	TC74VHC08FT-X	IC		
IC691	XC6206P182M-X	IC		
IC801	AN4801SB-W	IC		
Q291	2SB1424/QR/-W	TRANSISTOR		
Q631	2SA1037AK/RS/-X	TRANSISTOR		
C201	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C251	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C252	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C253	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C255	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C258	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C259	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C291	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C603	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C604	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C605	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C606	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C610	NCB31CK-563X	C CAPACITOR	0.056uF 16V K	
C611	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C612	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C614	NCB31CK-393X	C CAPACITOR	0.039uF 16V K	
C615	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C616	NCB31HK-182X	C CAPACITOR	1800pF 50V K	
C621	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C622	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C623	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C624	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C631	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C632	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C633	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C641	NDC31HJ-4R0X	C CAPACITOR	4pF 50V J	
C651	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C652	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C653	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C654	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C655	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C656	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C657	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C658	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C659	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C661	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C662	NCB21CK-124X	C CAPACITOR	0.12uF 16V K	
C663	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C664	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C665	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C666	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C667	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C669	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C672	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C673	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C674	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C675	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C676	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C677	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C678	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C679	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C681	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C801	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C802	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C803	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C804	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C805	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C806	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
R253	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R255	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R256	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R257	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R258	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R259	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R261	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R262	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R263	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R264	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R265	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R267	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R271	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R274	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R278	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R281	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R282	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R283	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R284	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R285	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R286	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R287	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R288	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R289	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R290	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R291	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R292	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R293	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R294	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R295	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R296	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R297	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R298	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R601	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R602	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R603	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R604	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R605	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R606	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R607	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R608	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R611	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R613	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R617	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R621	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R622	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R624	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R625	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R631	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R632	NRSA63J-3R9X	MG RESISTOR	3.9Ω 1/16W J	
R634	NRSA63J-3R9X	MG RESISTOR	3.9Ω 1/16W J	
R635	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R651	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R652	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R653	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R654	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R655	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R656	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R657	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R658	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R659	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R661	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R662	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R663	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R664	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R665	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R666	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R667	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R668	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R669	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R671	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R672	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R673	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R674	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R675	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R676	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R677	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R678	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R679	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R681	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R682	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R801	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R802	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R803	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R805	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R806	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R807	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R809	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R811	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R812	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R814	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R815	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R816	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R818	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
CN251	QGF1036F1-15	CONNECTOR	FFC/FPC (1-15)	
CN252	QGA2001F1-02	CONNECTOR	W-B (1-2)	
CN253	QGA2001F1-03	CONNECTOR	W-B (1-3)	
CN601	QGF1006F2-16W	CONNECTOR	FFC/FPC (1-16)	
CN602	QGA2001F1-06	CONNECTOR	W-B (1-6)	
CN651	QGF1036F1-17	CONNECTOR	FFC/FPC (1-17)	
K654	NQR0007-002X	FERRITE BEADS		
X251	QAX0684-001Z	C RESONATOR		
X651	NAX0476-001X	CRYSTAL		

Loading switch board

Block No. [0][5][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC1	LB1641	IC		
IC2	LB1641	IC		
D1	MTZJ6.2A-T2	Z DIODE		
C1	QEKC1AM-107Z	E CAPACITOR	100uF 10V M	
C2	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C3	QFLC1HJ-103Z	M CAPACITOR	0.01uF 50V J	
C5	QFLC1HJ-103Z	M CAPACITOR	0.01uF 50V J	
C6	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C7	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
CN1	QGF1036F1-15	CONNECTOR	FFC/FPC (1-15)	
CN2	QGB1214J1-08S	CONNECTOR	B-B (1-8)	
CN3	QGB1214K1-08S	CONNECTOR	B-B (1-8)	
SW1	QSW0844-001	PUSH SWITCH		
SW2	QSW0844-001	PUSH SWITCH		
SW3	QSW0844-001	PUSH SWITCH		
SW4	QSW0844-001	PUSH SWITCH		
SW5	QSW0844-001	PUSH SWITCH		
SW6	QSW0854-002	PUSH SW		
SW7	QSW0886-002	DETECT SWITCH		
SW8	QSW0886-002	DETECT SWITCH		

Head amp. board

Block No. [0][6][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC1	SG-105F3-BB,C	PHOTO SENSER		
D1	1SR139-400-T2	SI DIODE		
CN1	QGF1205F1-09	CONNECTOR	FFC/FPC (1-9)	
P1	QNZ0104-001	POST PIN		
SW1	QSW0832-001	CASS.SWITCH		
SW2	QSW0832-001	CASS.SWITCH		
SW5	QSW0832-001	CASS.SWITCH		
SW6	QSW0859-001	DETECT SWITCH		

Cassette switch board

Block No. [0][7][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC32	HA12238F	IC		
IC33	CD4094BC	IC		
Q302	2SC2001/K/-T	TRANSISTOR		
Q305	2SC2001/K/-T	TRANSISTOR		
Q342	KRA111M-T	DIGI TRANSISTOR		

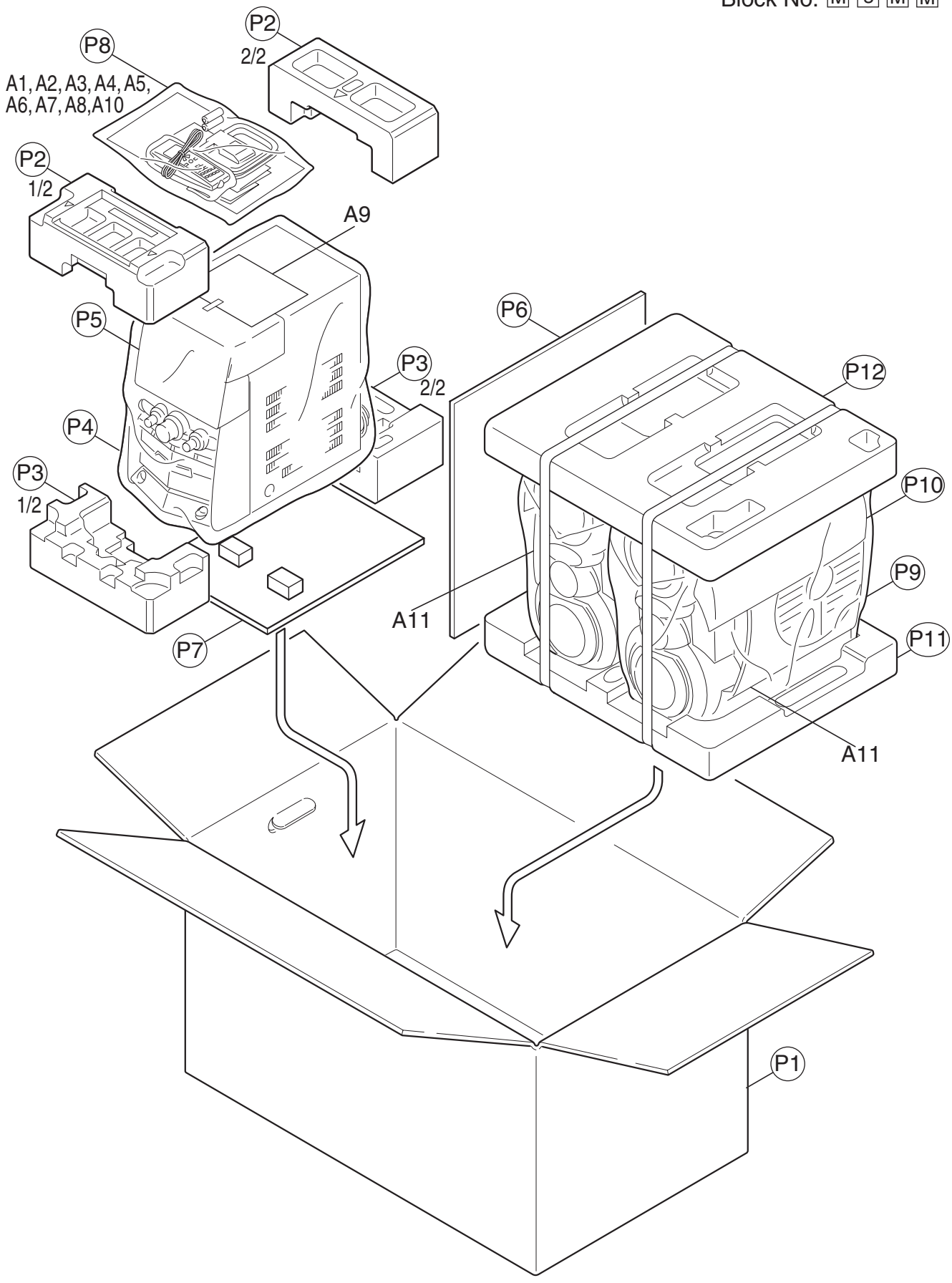
⚠ Symbol No.	Part No.	Part Name	Description	Local
Q343	2SC3576-JVC-T	TRANSISTOR		
Q344	2SC3576-JVC-T	TRANSISTOR		
Q345	2SC3576-JVC-T	TRANSISTOR		
Q346	2SC3576-JVC-T	TRANSISTOR		
Q347	KRC107M-T	TRANSISTOR		
Q371	KTA1271/OY/-T	TRANSISTOR		
Q372	KRC107M-T	TRANSISTOR		
Q375	2SB562/C/-T	TRANSISTOR		
Q376	KTC3199/GL/-T	TRANSISTOR		
D340	MTZJ5.1B-T2	Z DIODE		
D375	MTZJ5.1B-T2	Z DIODE		
C101	QDGB1HK-821Y	C CAPACITOR	820pF 50V K	
C102	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C103	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C104	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C105	QCBB1HK-391Y	C CAPACITOR	390pF 50V K	
C106	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M	
C107	QCBB1HK-271Y	C CAPACITOR	270pF 50V K	
C109	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C110	QDYB1CM-682Y	C CAPACITOR	6800pF 16V M	
C113	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C120	QCSB1HK-4R7Y	C CAPACITOR	4.7pF 50V K	
C121	QCBB1HK-331Y	C CAPACITOR	330pF 50V K	
C201	QDGB1HK-821Y	C CAPACITOR	820pF 50V K	
C202	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C203	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C204	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C205	QCBB1HK-391Y	C CAPACITOR	390pF 50V K	
C206	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M	
C207	QCBB1HK-271Y	C CAPACITOR	270pF 50V K	
C209	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C210	QDYB1CM-682Y	C CAPACITOR	6800pF 16V M	
C213	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C220	QCSB1HK-4R7Y	C CAPACITOR	4.7pF 50V K	
C221	QCBB1HK-331Y	C CAPACITOR	330pF 50V K	
C300	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C301	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C304	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C306	QETJ1AM-227Z	E CAPACITOR		
C307	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
C308	QDXB1CM-152Y	C CAPACITOR	1500pF 16V M	
C310	QCBB1HK-223Y	C CAPACITOR	0.022uF 50V K	
C313	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C314	QCFB1HZ-105Y	C CAPACITOR	1uF 50V Z	
C316	QFG32AJ-223Z	PP CAPACITOR	0.022uF 100V J	
C319	QFLC1HJ-472Z	M CAPACITOR	4700pF 50V J	
C331	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C340	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C341	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C342	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C371	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C374	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C376	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
R101	QRE141J-512Y	C RESISTOR	5.1kΩ 1/4W J	
R102	QRE141J-512Y	C RESISTOR	5.1kΩ 1/4W J	
R104	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R105	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R106	QRE141J-113Y	C RESISTOR	11kΩ 1/4W J	
R107	QRE141J-912Y	C RESISTOR	9.1kΩ 1/4W J	
R108	QRE141J-273Y	C RESISTOR	27kΩ 1/4W J	
R110	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R116	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R121	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R201	QRE141J-512Y	C RESISTOR	5.1kΩ 1/4W J	
R202	QRE141J-512Y	C RESISTOR	5.1kΩ 1/4W J	
R204	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R205	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R206	QRE141J-113Y	C RESISTOR	11kΩ 1/4W J	
R207	QRE141J-912Y	C RESISTOR	9.1kΩ 1/4W J	
R208	QRE141J-273Y	C RESISTOR	27kΩ 1/4W J	
R210	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R216	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R221	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R301	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R302	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R303	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R304	QRJ146J-101X	UNF C RESISTOR	100Ω 1/4W J	
R305	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R306	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
⚠ R310	QRJ146J-4R7X	UNF C RESISTOR	4.7Ω 1/4W J	
R313	QRE141J-2R2Y	C RESISTOR	2.2Ω 1/4W J	
R314	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R315	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R327	QRE141J-474Y	C RESISTOR	470kΩ 1/4W J	
R335	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R336	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R337	QRE141J-332Y	C RESISTOR	3.3kΩ 1/4W J	
R338	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	
R339	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R340	QRE141J-681Y	C RESISTOR	680Ω 1/4W J	
R341	QRE141J-123Y	C RESISTOR	12kΩ 1/4W J	
R342	QRE141J-243Y	C RESISTOR	24kΩ 1/4W J	
R343	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J	
R344	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R345	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R346	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R347	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
⚠ R353	QRZ9005-100X	F.RESISTOR	10Ω	
R371	QRE141J-123Y	C RESISTOR	12kΩ 1/4W J	
R372	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R375	QRE141J-151Y	C RESISTOR	150Ω 1/4W J	
R376	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
VR31	QVP0008-203Z	TRIM RESISTOR	20kΩ	
VR37	QVP0077-103Z	TRIM RESISTOR	10kΩ	
L301	QQR1118-002	OSC COIL(BIAS)		
L303	QQL244K-100Z	COIL	10uH K	
CN31	QGF1205F1-06	CONNECTOR	FFC/FPC (1-6)	
CN32	QGF1205F1-09	CONNECTOR	FFC/FPC (1-9)	
CN33	QGF1205F1-09	CONNECTOR	FFC/FPC (1-9)	
CN34	QGF1201F3-10	CONNECTOR	FFC/FPC (1-10)	
FW100	QUM024-07A2Z3	PARA RIBON WIRE		
H32	GV40397-001A	IC HOLDER		

< MEMO >

Packing materials and accessories parts list

Block No. M 3 M M



Packing and accessories

Block No. [M][3][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
A 1	GVT0100-002A	INST BOOK	ENG,FRE	Z30C
A 1	GVT0100-001B	INST BOOK	ENG	Z30J
A 2	YU20333	SAFETY INST.		
A 3	BT-52006-2	WARRANTY CARD		Z30C
A 4	QAL0014-001	AM LOOP ANT		
A 5	QAL0457-001	ANT.WIRE		
A 6	RM-SHXZ10A	REMOCON		
A 7	----------	BATTERY	(x2)	
A 8	GV40406-001A	NOTICE SHEET		
A 9	GV40436-001A	CAUTION SHEET		
A 10	BT-51028-2	REGISTER CARD		Z30J
A 11	HXZ30J-SPBOX-R	SPK WITH BOX		
A 11	HXZ30J-SPBOX-L	SPK WITH BOX		
P 1	GV20230-002A	CARTON ASSY.		Z30C
P 1	GV20230-001A	CARTON ASSY.		Z30J
P 2	GV10141-001A	CUSHION TOP		
P 3	GV10142-001A	CUSHION BOTTOM		
P 4	QPC06507015P	POLY BAG	65cm x 70cm	
P 5	GV40168-007A	SHEET		
P 6	GV40232-006A	CARTON SPACER		
P 7	GV30491-002A	CUSHION SPACER		
P 8	QPC02503515P	POLY BAG	25cm x 35cm	
P 9	700-120076-10	HDPE BAG	(x2)	
P 10	715-250054-00	MIRAMAT SHEET	(x2)	
P 11	720-B1XZ30-00	POLYFOAM BOTTOM		
P 12	720-T1XZ30-00	POLYFOAM TOP		